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EDUCATION

Ph.D. (1987), Univ. of Toronto, in Computer Science.

M.Sc. (1982), Univ. of Toronto, in Computer Science.

B.Sc. (1981), National Technical Univ. of Athens, in Electrical Engineering.

UNIVERSITY EXPERIENCE

1981-1985	Tutor and instructor in several introductory and data base courses at Univ. of Toronto.
1985-1991	Assistant Professor, Department of Computer Science, University of Maryland at College Park. Date of initial appointment: 8/16/1985.
1991-1998	Associate Professor, Department of Computer Science, University of Maryland at College Park. Date of appointment: August 1991.
1997-1998	Visiting Associate Professor, Department of Computer Science, Carnegie Mellon University.
1998-2000	Associate Professor, Department of Computer Science, Carnegie Mellon University.
2000-	Full Professor, Department of Computer Science, Carnegie Mellon University.
2020-	Fredkin Professor of Computer Science (CMU, CSD)

PUBLICATIONS

BOOKS

1. Christos Faloutsos, *Searching multimedia databases by content*, Kluwer Academic Publishers, Norwell, MA, 1996. ISBN 0-7923-9777-0.
2. Deepayan Chakrabarti and Christos Faloutsos, *Graph Mining: Laws, Tools, and Case Studies*, Synthesis Lectures on Data Mining and Knowledge Discovery, Morgan Claypool, Oct. 2012. ISBN 978-1608451151.
3. Robson Leonardo Ferreira Cordeiro, Christos Faloutsos, and Caetano Traina Junior, *Data Mining in Large Sets of Complex Data*, Springer Briefs in Computer Science, 2013, (soft cover) ISBN 978-1-4471-4889-0.
4. Danai Koutra and Christos Faloutsos, *Individual and Collective Graph Mining: Principles, Algorithms, and Applications*, Synthesis Lectures on Data Mining and Knowledge Discovery, Morgan Claypool, Oct 2017. ISBN: 978-1681730394.

EDITED BOOK.

1. Philip S. Yu, Jiawei Han, Christos Faloutsos, *Link Mining: Models, Algorithms, and Applications.* Springer, 2010.

BOOK CHAPTERS.

1. C. Faloutsos and S. Christodoulakis, *Access Methods for Documents*, in "Office Information Systems", Springer Verlag 1984, (Editor: D. Tsichritzis).
2. C. Faloutsos, *Integrated Access Methods for Messages Using Signature Files*, in "Office Systems: Methods and Tools" North Holland 1987, pp. 137-157. Editors: G. Bracchi and D. Tsichritzis. The paper also appeared in the IFIP WG 8.4 Conference, Pisa, Italy, October 1986.
3. C. Faloutsos, *Signature Files*, in "Information Retrieval: Data Structures and Algorithms". Editors: W. Frakes and R. Baeza-Yates, Prentice Hall, 1992.
4. C. Faloutsos, *Signature Files for Text Retrieval: A Survey*, in "Special Topics on Databases" (in Greek).

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5. Manish Arya, William Cody, Christos Faloutsos, Joel Richardson and Arthur Toga *Design and Implementation of QBISM, a 3-D Medical Image Database System,* in "Multimedia Database Systems: Issues and Research Directions". Editors: Sushil Jajodia and V.S. Subrahmanian, Springer Verlag, 1996.
6. Christos Faloutsos *Indexing of Multimedia Databases* in "Multimedia Databases in Perspective". Editors: P.G.M. Apers, H.M. Blanken, M.A.W. Houtsma, Springer Verlag London, March 1997.
7. Christos Faloutsos *Spatial, Text and Multimedia Databases* in "Advanced Database Systems". Editor: Carlo Zaniolo. Morgan Kaufmann Publishers Inc., San Francisco, CA, May 1997.
8. F. Korn, N. Sidiropoulos, C. Faloutsos, E. Siegel, Z. Protopapas. *Efficient and Effective Nearest Neighbor Search in a Medical Image Database of Tumor Shapes,* in ‘‘Image Description and Retrieval’’. Editor: Enrico Vicario. Plenum Press, Italy, 1997.
9. F. Korn, N. Sidiropoulos, C. Faloutsos, E. Siegel, Z. Protopapas. *Indexing Large Tumor-like Shape Databases,* in ‘‘Advances in Biomedical Image Databases’’, Editor: Stephen Wong. Kluwer Academic Press, Boston, MA, 1998.
10. Christos Faloutsos, *Multimedia IR: Indexing and Searching,* in ‘‘Modern Information Retrieval’’ Editors: Ricardo Baeza-Yates and Berthier Ribeiro-Neto. Addison Wesley Longman, 1999.
11. Christos Faloutsos *Multimedia Indexing* in ‘‘Image Databases: Search and Retrieval of Digital Imagery’’. Editors: Vittorio Castelli and Lawrence Bergman. Wiley, 2002
12. Spiros Papadimitriou, Anthony Brockwell and Christos Faloutsos *Adaptive, Automatic Stream Mining* in ‘‘Data Stream Management: Processing High-Speed Data Streams’’. Editors: Minos Garofalakis, Johannes Gehrke, Rajeev Rastogi. Springer, 2006.
13. Spiros Papadimitriou, Jimeng Sun, Christos Faloutsos, *Dimensionality Reduction and Forecasting on Streams,* in: Charu Aggarwal (ed.), "Data Streams: Models and Algorithms", Kluwer, 2006.
14. Deepayan Chakrabarti and Christos Faloutsos *Graph Patterns and the R-MAT Generator* in ‘‘Mining Graph Data’’. Editors: Diane J. Cook and Lawrence B. Holder. Wiley, 2007.
15. Dimitris Margaritis, Christos Faloutsos and Sebastian Thrun *NetCube: Fast, Approximate Database Queries Using Bayesian Networks* in ‘‘Bayesian Network Technologies: Applications and Graphical Models’’. Editors: Ankush Mittal and Ashraf Kassim. IGI Global, March 2007.
16. Mary McGlohon, Leman Akoglu, and Christos Faloutsos *Statistical Properties of Social Networks* in ‘‘Social Network Data Analytics’’. Editor: Charu Aggarwal. Springer, 2011.
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J3. C. Faloutsos, *Access Methods for Text,* ACM Computing Surveys, 17, 1, pp. 49-74, March 1985.

J4. S. Christodoulakis and C. Faloutsos *A Multimedia Document Server,* IEEE Aerospace and Electronic Systems Magazine, 1, 11, November 1986, pp. 2-9.

J5. S. Christodoulakis and C. Faloutsos, *Design and Performance Considerations for an Optical Disk Based Multimedia Object Server,* IEEE Computer Magazine, 19, 12, pp. 45-56, Dec. 1986.

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J8. N. Roussopoulos, C. Faloutsos and T. Sellis, *An Efficient Pictorial Database System for PSQL,* IEEE Trans. on Software Engineering (TSE), Vol. 14, No. 5, pp. 639-650, May 1988.

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J11. C. Faloutsos *Signature Files: An Integrated Access Method for Text and Attributes, Suitable for Optical Disk Storage*, BIT, 28, 4, pp. 736-754, 1988.

J12. C. Faloutsos and W. Rego, *Tri-cell: A Data Structure for Spatial Objects*, Information Systems, Vol. 14, No. 2, pp. 131-139, 1989.

J13. C-C. Lin, L. Mark, T. Sellis and C. Faloutsos, *Performance Issues in the Binary Relationship Model*, Intern. Journal on Data and Knowledge Engineering, Vol. 4, pp. 195-221, 1989.

J14. Y. Manolopoulos and C. Faloutsos *Analysis of the End of Block Wasted Space* BIT, vol. 30, pp. 620-630, 1990.

J15. C. Faloutsos, R. Lee, C. Plaisant and B. Shneiderman *Incorporating String Search in a Hypertext System: User Interface and Signature File Design Issues* Hypermedia, Vol. 2, No. 3, pp. 183-200, 1990.

J16. T. Sellis, N. Roussopoulos, L. Mark and C. Faloutsos, *An Architecture for High Performance Engineering Information Systems*, IEEE Trans. on Software Engineering (TSE), Vol. 17, No. 1, pp. 22-33, Jan. 1991.

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J30. Peter Triantafillou and Christos Faloutsos *Optimal Striping for Parallel I/O in Modern Applications* Parallel Computing, vol. 24, no. 1, pp. 21-43, Feb. 1998.

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J32. Bongki Moon, H.V. Jagadish, Christos Faloutsos and Joel Salz *Analysis of the Clustering Properties of the Hilbert Space-Filling Curve* IEEE Trans. on Knowledge and Data Engineering (IEEE-TKDE), vol. 13, no. 1, pp. 124-141, Jan./Feb. 2001.

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Based on Spatial Similarity IEEE Trans. on Knowledge and Data Engineering (IEEE-TKDE), 14, 5, Sept./Oct. 2002, pp. 979-987.

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J48. Christos Faloutsos and Vasileios Megalooikonomou *On Data Mining, Compression, and Kolmogorov Complexity* Data Mining and Knowledge Discovery, Tenth Anniversary Issue, 2007.

J49. Yufei Tao, Christos Faloutsos and Dimitris Papadias *Spatial Query Estimation withouth the Local Uniformity Assumption* GeoInformatica, 10,3, Sept. 2006, pp. 261-293.

J50. Deepayan Chakrabarti and Christos Faloutsos *Graph mining: Laws, generators, and algorithms* ACM Computing Surveys (CSUR) 38,1, Article No. 2 (2006)

J51. Jurij (Jure) Leskovec, Jon Kleinberg and Christos Faloutsos *Graph Evolution: Densification and Shrinking Diameters* ACM TKDD, 1(1), 2007.

J52. Elaine P.M. de Sousa, Agma J.M. Traina, Caetano Traina Jr. and Christos Faloutsos *Measuring Evolving Data Streams' Behavior through Their Intrinsic Dimension* New Generation Computing, 25,1, 2007, pp. 33-59.

J53. Deepayan Chakrabarti, Yang Wang, Chenxi Wang, Jurij Leskovec and Christos Faloutsos *Epidemic Thresholds in Real Networks* ACM Trans. on Information and System Security (TISSEC), 10(4), 2007.

J54. Hanghang Tong, Christos Faloutsos and Jia Yu (Tim) Pan *Random walk with restart: Fast solutions and applications* Knowledge and Information Systems, Springer, 2007

J55. Christian Boehm, Christos Faloutsos, Jia-Yu Pan, and Claudia Plant *RIC: Parameter-free noise-robust clustering* ACM TKDD, 1,3, article 10, Dec. 2007.

J56. Jimeng Sun, Dacheng Tao, Spiros Papadimitriou, Philip S. Yu and Christos Faloutsos *Incremental Tensor Analysis: theory and applications* ACM Transactions on Knowledge Discovery from Data (TKDD), 2(3), 2008.

J57. Andreas Krause, Jure Leskovec, Carlos Guestrin, Jeanne VanBriesen and Christos Faloutsos *Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks* American Society of Civil

Engineers (ASCE), 134, 6, Nov. 2008.

J58. Jimeng Sun, Charalampos E. Tsourakakis, Evan Hoke, Christos Faloutsos and Tina Eliassi-Rad *Two heads better than one: pattern discovery in time-evolving multi-aspect data* Journal Data Mining and Knowledge Discovery Volume 17, Number 1, pp 111-128, August, 2008

J59. Qiang Wang, Vasileios Megalooikonomou and Christos Faloutsos *Time Series Analysis with Multiple Resolutions* Information Systems, 2009.

J60. Leman Akoglu and Christos Faloutsos *RTG: a recursive realistic graph generator using random typing.* Data Mining and Knowledge Discovery, 19, 2, Oct. 2009 (DOI: 10.1007/s10618-009-0140-7)

J61. Jure Leskovec, Deepayan Chakrabarti, Jon M. Kleinberg, Christos Faloutsos, Zoubin Ghahramani *Kronecker Graphs: An Approach to Modeling Networks.* Journal of Machine Learning Research (JMLR) 11 (2010), pp. 985-1042.

J62. U Kang, Charalampos E Tsourakakis and Christos Faloutsos *PEGASUS: Mining Peta-Scale Graphs* Knowledge and Information Systems (KAIS).

J63. Yasushi Sakurai, Spiros Papadimitriou and Christos Faloutsos *Fast Discovery of Group Lag Correlations in Streams* IEEE TKDD, 2010.

J64. U Kang, Charalampos Tsourakakis, Ana Paula Appel, Christos Faloutsos, Jure Leskovec *HADI: Mining Radii of Large Graphs* ACM TKDD, 2010.

J65. Cui Zhu, Hiroyuki Kitagawa Spiros Papadimitriou, and Christos Faloutsos *Outlier Detection by Example*, Journal of Intelligent Information Systems (JIIS), 2010.

J66. Jose F. Rodrigues Jr., Hanghang Tong, Jia-Yu Pan, Agma J.M. Traina, Caetano Traina Jr., and Christos Faloutsos *Large Graph Analysis in the GMine System* IEEE TKDE 2011.

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J68. Koji Maruhashi, Fan Guo and Christos Faloutsos *MultiAspectForensics: Pattern Mining on Large-scale Heterogeneous Networks with Tensor Analysis* IJWET, 2012.

J69. B. Aditya Prakash, Deepayan Chakrabarti, Nicholas Valler, Michalis Faloutsos and Christos Faloutsos *Threshold Conditions for Arbitrary Cascade Models on Arbitrary Networks*, Knowledge and Information Systems, 2012.

J70. U Kang, Hanghang Tong, Jimeng Sun, Ching-Yung Lin, and Christos Faloutsos. *GBASE: An Efficient Analysis Platform for Large Graphs.* VLDB Journal, 2012.

J71. U Kang, Brendan Meeder, Evangelos E. Papalexakis, and Christos Faloutsos. *HEigen: Spectral Analysis for Billion-Scale Graphs* IEEE TKDE, 26, 2, Feb. 2014

J72. Jiwoon Ha, Sang-Wook Kim, Sang-Wook Kim, Christos Faloutsos, and Sunju Park *An Analysis on Information Diffusion through BlogCast in a Blogosphere* Information Sciences, 2014

J73. S. Navlakha, X. He, C. Faloutsos, Z. Bar-Joseph, Topological properties of robust biological and computational networks J. R. Soc. Interface, 11(96):20140283, 2014.

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J78. Stephen Ranshous, Shitian Shen, Danai Koutra, Steven Harenberg, Christos Faloutsos, and Nagiza F. Samatova *Anomaly Detection in Dynamic Detworks: A Survey.* WIREs Computational Statistics, Wiley, January 2015.

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6. Sebastian Thrun, Christos Faloutsos, Tom Mitchell, Larry Wasserman *Automated Learning and Discovery: State-Of-The-Art and Research Topics in a Rapidly Growing Field*, AI Magazine, 1999.

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C143. Spiros Papadimitriou, Jimeng Sun, Philip Yu and Christos Faloutsos *Hierarchical, Parameter-Free Community Discovery* PKDD 2008, Sept. 15-19 2008, Antwerp, Belgium.

C144. Hanghang Tong, Yasushi Sakurai, Tina Eliassi-Rad and Christos Faloutsos *Fast Mining of Complex Time-Stamped Events* CIKM 2008, Napa Valley, CA, USA, October 26-30, 2008.

C145. Humberto Razente, Maria Camila Barioni, Agma Traina, Christos Faloutsos, and Caetano Traina *A Novel Optimization Approach to Efficiently Process Aggregate Similarity Queries in MAM* CIKM 2008, Napa Valley, CA, USA, October 26-30, 2008.

C146. Ana Paula Appel, Deepayan Chakrabarti, Christos Faloutsos, Ravi Kumar, Jure Leskovec and Andrew Tomkins *ShatterPlots: Fast Tools for Mining Large Graphs* SDM 2008

C147. Chao Liu, Fan Guo, Christos Faloutsos *BBM: Deriving Click Models from Petabyte-scale Data* KDD 2009, Paris France.

C148. Charalampos Tsourakakis, U Kang, Gary Miller, Christos Faloutsos *Doulion: Counting triangles in massive graphs with a coin* KDD 2009, Paris France.

C149. Lei Li, Jim McCann, Nancy Pollard, Christos Faloutsos *DynaMMo: Mining and Summarization of Coevolving Sequences with Missing Values* KDD 2009, Paris France.

C150. Nan Du, Christos Faloutsos, Bai Wang, Leman Akoglu *Large Human Communication Networks: Patterns and a Utility-Driven Generator* KDD 2009, Paris France.

C151. Kensuke Onuma, Hanghang Tong, Christos Faloutsos *TANGENT: A Novel Surprise-Me Recommendation Algorithm* KDD 2009, Paris France.

C152. B. Aditya Prakash, Nicholas Valler, David Andersen, Michalis Faloutsos, Christos Faloutsos *BGP-lens: Patterns and Anomalies in Internet Routing Updates* (industrial track) KDD 2009, Paris France.

C153. Mary McGlohon, Stephen Bay, Markus Anderle, David Steier, Christos Faloutsos *SNARE: A Link Analytic System for Graph Labeling and Risk Detection* (industrial track), KDD 2009, Paris France.

C154. Hanghang Tong, Huiming Qu, Hani Jamjoom and Christos Faloutsos *iPoG: Fast Interactive Proximity Querying on Graphs* (short paper) CIKM 2009, Hong Kong, China, Nov. 2009.

C155. Leman Akoglu and Christos Faloutsos *RTG: A Recursive Realistic Graph Generator using Random Typing.* ECML PKDD, Bled, Slovenia, Sep. 2009 *(Best Knowledge Discovery Paper award).*

C156. Robson Leonardo Ferreira Cordeiro, Agma J.M. Traina, Christos Faloutsos, and Caetano Traina, *Finding Clusters in Subspaces of Very Large, Multi-dimensional Datasets* ICDE, Long Beach, CA, March 2010.

C157. U Kang, Charalampos Tsourakakis, and Christos Faloutsos, *PEGASUS: A Peta-Scale Graph Mining System - Implementation and Observations* ICDM, Miami Florida, Dec. 2009 (Runner up for *Best student paper* award).

C158. U Kang, Charalampos (Babis) Tsourakakis, Ana Paula Appel, Christos Faloutsos and Jure Leskovec *Radius Plots for Mining Tera-byte Scale Graphs: Algorithms, Patterns, and Observations* SDM'2010, Columbus, OH, April-May 2010.

C159. Keith Henderson, Tina Eliassi-Rad, Spiros Papadimitriou, Christos Faloutsos *HCDF: A Hybrid Community Discovery Algorithm* 326 - 2010 SIAM (SDM'2010), Columbus, OH, April-May 2010.

C160. Michael Barnathan, Vasilis Megalooikonomou, Feroze Mohamed, Scott Faro and Christos Faloutsos

TWave: High-Order Analysis of Spatiotemporal Data PAKDD 2010, Hyderabad, India, 21-24 June 2010.

C161. B. Aditya Prakash, Mukund Seshadri, Ashwin Sridharan, Sridhar Machiraju and Christos Faloutsos *EigenSpokes: Surprising Patterns and Scalable Community Chipping in Large Graphs* PAKDD 2010, Hyderabad, India, 21-24 June 2010.

C162. Leman Akoglu, Mary McGlohon and Christos Faloutsos *Oddball: Spotting Anomalies in Weighted Graphs* PAKDD 2010, Hyderabad, India, 21-24 June 2010.

C163. Hanghang Tong, Spiros Papadimitriou Christos Faloutsos Philip S. Yu, and Tina Eliassi-Rad *Basset: Scalable Gateway Finder in Large Graphs* PAKDD 2010, Hyderabad, India, 21-24 June 2010.

C164. Kriti Puniyani, Christos Faloutsos and Eric Xing *Automated Concise Extraction of Spatial Gene Expression Patterns from Fly Embryo ISH Images* ISMB 2010

C165. Keith Henderson, Tina Eliassi-Rad, Christos Faloutsos, Leman Akoglu, Lei Li, Koji Maruhashi, B. Aditya Prakash, Hanghang Tong *MetricForensics: A Multi-Level Approach for Mining Volatile Graphs* KDD (IG Track), Washington DC, July 2010.

C166. Lei Li, Nancy Pollard, Christos Faloutsos, Jim McCann *BoLeRO: A Principled Technique for Including Bone Length Constraints in Motion Capture Occlusion Filling* SCA, Madrid, Spain, July 2010.

C167. B. Aditya Prakash, Hanghang Tong, Nicholas Valler, Michalis Faloutsos and Christos Faloutsos *Virus Propagation on Time-Varying Networks: Theory and Immunization Algorithms* ECML/PKDD, Barcelona, Spain, Sept. 2010.

C168. Pedro O.S. Vaz de Melo, Leman Akoglu, Christos Faloutsos and Antonio A.F. Loureiro *Surprising Patterns for the Call Duration Distribution of Mobile Phone Users* ECML/PKDD, Barcelona, Spain, Sept. 2010.

C169. Nan Du, Hao Wang and Christos Faloutsos *xSocial: Analysis of Large Multi-Modal Social Networks Patterns and a Generator* ECML/PKDD, Barcelona, Spain, Sept. 2010.

C170. U Kang, Mary McGlohon, Leman Akoglu, and Christos Faloutsos *Patterns on the Connected Components of Terabyte-Scale Graphs* (short paper) ICDM, Sydney, Australia, Dec. 14-17, 2010.

C171. Robson L. F. Cordeiro, Fan Guo, Donna S. Haverkamp, James H. Horne, Ellen K. Hughes, Gunhee Kim, Agma J. M. Traina, Caetano Traina Jr., and Christos Faloutsos *QMAS: Querying, Mining And Summarization of Multi-modal Databases* (short paper) ICDM, Sydney, Australia, Dec. 14-17, 2010.

C172. Hanghang Tong, B. Aditya Prakash, Charalampos Tsourakakis, Tina Eliassi-Rad, Christos Faloutsos, and Duen Horng "Polo" Chau, *On the Vulnerability of Large Graphs* (short paper) ICDM, Sydney, Australia, Dec. 14-17, 2010.

C173. Duen Horng Chau, Aniket Kittur, Jason I. Hong and Christos Faloutsos, *Making Sense of Large Network Data: Combining Rich User Interaction and Machine Learning.* Proc. CHI'11, Vancouver, BC, Canada. May 7-12, 2011.

C174. Pedro Olmo Stancioli Vaz de Melo, Christos Faloutsos, and Antonio Loureiro *Human Dynamics in Large Communication Networks* SIAM Data Mining, Phoenix/Mesa AZ, April 28-30, 2011

C175. Duen Horng (Polo) Chau, Carey Nachenberg, Jeffrey Wilhelm, Adam Wright, and Christos Faloutsos *Large Scale Graph Mining and Inference for Malware Detection* SIAM Data Mining, Phoenix/Mesa AZ, April 28-30, 2011

C176. Yasushi Sakurai, Lei Li, Yasuko Matsubara, and Christos Faloutsos *WindMine: Fast and Effective Mining of Web-click Sequences* SIAM Data Mining, Phoenix/Mesa AZ, April 2011

C177. U Kang, Duen Horng (Polo) Chau, and Christos Faloutsos *Mining Large Graphs: Algorithms, Inference, and Discoveries* ICDE, Hannover, Germany, April 11-16, 2011.

C178. U Kang, Brendan Meeder and Christos Faloutsos *Spectral Analysis for Billion-Scale Graphs: Discoveries and Implementation* PAKDD, Shenzhen China, May 24-27, 2011 ('best application paper' award).

C179. Koji Maruhashi, Fan Guo and Christos Faloutsos MultiAspectForensics: Pattern mining on large-scale heterogeneous networks with tensor analysis ASONAM, Kaohsiung, Taiwan, July 2011.

C180. Robson F.L. Cordeiro, Caetano Traina Jr., Agma J. M. Traina, Julio Lopez, U Kang and Christos Faloutsos *Clustering Very Large Multi-dimensional Datasets with MapReduce* ACM KDD, San Diego, CA, USA, Aug. 2011.

C181. Keith Henderson, Brian Gallagher, Lei Li, Leman Akoglu, Tina Eliassi-Rad, Hanghang Tong and Christos Faloutsos *It's Who You Know: Graph Mining Using Recursive Structural Features* ACM KDD, San Diego, CA, USA, Aug. 2011.

C182. Lei Li, Chieh-Jan Mike Liang, Jie Liu, Suman Nath, Andreas Terzis and Christos Faloutsos

ThermoCast: A Cyber-Physical Forecasting Model for Data Centers ACM KDD, San Diego, CA, USA, Aug. 2011.

C183. Danai Koutra, Tai-You Ke, U. Kang, Duen Horng Chau, Hsing-Kuo Kenneth Pao, Christos Faloutsos: *Unifying Guilt-by-Association Approaches: Theorems and Fast Algorithms.* ECML/PKDD (2) 2011: 245-260, Athens, Greece, Sept. 2011.

C184. Min-Hee Jang, Sang-Wook Kim, Christos Faloutsos, Sunju Park *A Linear-Time Approximation of the Earth Mover's Distance* CIKM 2011, Glasgow, UK, Oct. 24-28, 2011.

C185. Duck-Ho Bae, Se-Mi Hwang, Sang-Wook Kim, Christos Faloutsos *Constructing Seminal Paper Genealogy* (poster). CIKM 2011, Glasgow, UK, Oct. 24-28, 2011.

C186. Sang-Wook Kim, Ki-Nam Kim, Christos Faloutsos *Spectral Analysis of a Blogosphere* (poster). CIKM 2011, Glasgow, UK, Oct. 24-28, 2011.

C187. U Kang and Christos Faloutsos *Beyond Caveman Communities: Hubs and Spokes for Graph Compression and Mining* ICDM 2011, Vancouver, BC, Canada, Dec. 11-14, 2011.

C188. B. Aditya Prakash, Deepayan Chakrabarti, Michalis Faloutsos, Nicholas Valler, and Christos Faloutsos *Threshold Conditions for Arbitrary Cascade Models on Arbitrary Networks* ICDM 2011, Vancouver, BC, Canada, Dec. 11-14, 2011.

C189. U Kang, Duen Horng (Polo) Chau, and Christos Faloutsos *PEGASUS: Mining Billion-Scale Graphs in the Cloud* ICASSP 2012, Kyoto, Japan, March 25-30 2012.

C190. Leman Akoglu, Hanghang Tong, Brendan Meeder and Christos Faloutsos *PICS: Parameter-free Identification of Cohesive Subgroups in Large Attributed Graphs* SDM 2012, Anaheim, CA, USA, April 26-28, 2012.

C191. Fragkiskos D. Malliaros, Vasileios Megalooikonomou, and Christos Faloutsos *Fast Robustness Estimation in Large Social Graphs: Communities and Anomaly Detection* SDM 2012, Anaheim, CA, USA, April 26-28, 2012.

C192. Leman Akoglu, Pedro Olmo Stancioli Vaz de Melo and Christos Faloutsos *Quantifying Reciprocity in Large Weighted Communication Networks* PAKDD 2012, Kuala Lumpur, Malaysia, May 29 - June 1, 2012

C193. B. Aditya Prakash, Alex Beutel, Roni Rosenfeld and Christos Faloutsos *Winner Takes All: Competing Viruses or Ideas on fair-play Networks* WWW 2012, Lyon, France, April 16-20, 2012

C194. Leman Akoglu, Duen Horng (Polo) Chau, U Kang, Danai Koutra and Christos Faloutsos OPAvion: Mining and Visualization in Large Graphs SIGMOD 2012 (demo), Scottsdale, AZ, USA, May 20-24, 2012.

C195. Ahmed Metwally and Christos Faloutsos *V-SMART-Join: A Scalable MapReduce Framework for All-Pair Similarity Joins of Multisets and Vectors* VLDB 2012, Istanbul, Turkey, Aug. 2012.

C196. Yasuko Matsubara, Yasushi Sakurai, Christos Faloutsos, Tomoharu Iwata, and Masatoshi Yoshikawa, *Fast Mining and Forecasting of Complex Time-Stamped Events* KDD 2012, Beijing, China, Aug. 2012.

C197. Yasuko Matsubara, Yasushi Sakurai, B. Aditya Prakash, Lei Li, and Christos Faloutsos, *Rise and Fall Patterns of Information Diffusion: Model and Implications* KDD 2012, Beijing, China, Aug. 2012.

C198. Keith Henderson, Brian Gallagher, Tina Eliassi-Rad, Hanghang Tong, Sugato Basu, Leman Akoglu, Danai Koutra, Lei Li, and Christos Faloutsos, *RolX: Structural Role Extraction & Mining in Large Graphs* KDD 2012, Beijing, China, Aug. 2012.

C199. Alex Beutel, B. Aditya Prakash, Roni Rosenfeld, and Christos Faloutsos, *Interacting Viruses in Networks: Can Both Survive?* KDD 2012, Beijing, China, Aug. 2012.

C200. U Kang, Evangelos Papalexakis, Abhay Harpale, and Christos Faloutsos, *GigaTensor: Scaling Tensor Analysis Up By 100 Times - Algorithms and Discoveries* KDD 2012, Beijing, China, Aug. 2012.

C201. Ilari Shafer, Kai Ren, Vishnu Naresh, Yoshihisa Abe, and Christos Faloutsos *RainMon: An Integrated Approach to Mining Bursty Timeseries Monitoring Data* (I+G track) KDD 2012, Beijing, China, Aug. 2012.

C202. Evangelos (Vagelis) Papalexakis, Christos Faloutsos, and Nicholas Sidiropoulos, *ParCube: Sparse Parallelizable Tensor Decompositions* ECML/PKDD 2012, Bristol UK, Sept. 24-28, 2012.

C203. Hanghang Tong, B. Aditya Prakash, Tina Eliassi-Rad, Michalis Faloutsos, Christos Faloutsos *Gelling, and Melting, Large Graphs by Edge Manipulation*, CIKM 2012, Maui, Hawaii, USA, Oct. 29 - Nov. 2, 2012. *(Best paper award).*

C204. Leman Akoglu, Hanghang Tong, Jilles Vreeken, and Christos Faloutsos *Fast and Reliable Anomaly Detection in Categoric Data*, CIKM 2012, Maui, Hawaii, USA, Oct. 29 - Nov. 2, 2012.

C205. Xuetao Wei, Nicholas Valler, Iulian Neamtiu, Michalis Faloutsos, B. Aditya Prakash, and Christos

Faloutsos *Competing Meme Propagation on Networks: A Case Study of Composite Networks* In ACM SIGCOMM CCR, 2012.

C206. B. Aditya Prakash, Jilles Vreeken, and Christos Faloutsos: *Spotting Culprits in Epidemics: How many and Which ones?* ICDM 2012, Brussels, Belgium, Dec. 10-13, 2012.

C207. Danai Koutra, Joshua Vogelstein, Christos Faloutsos. *DeltaCon: A Principled Massive-Graph Similarity Function* SDM 2013, Austin, Texas, May 2013.

C208. Misael Mongiovi, Petko Bogdanov, Razvan Ranca, Ambuj K. Singh, Evangelos E. Papalexakis, Christos Faloutsos *NetSpot: Spotting Significant Anomalous Regions on Dynamic Networks,* SIAM DM, Austin, Texas, May 2013.

C209. B. Aditya Prakash, Lada Adamic, Theodore Iwashnya, Hanghang Tong and Christos Faloutsos *Fractional Immunization on Networks* SIAM DM, Austin, Texas, May 2013.

C210. Leman Akoglu, Jilles Vreeken, Hanghang Tong, Duen Horng Chau, Nikolaj Tatti, and Christos Faloutsos *Mining Connection Pathways for Marked Nodes in Large Graphs* SIAM SDM, Austin, Texas, May 2013.

C211. Danai Koutra, Vasileios Koutras, B. Aditya Prakash, Christos Faloutsos. *Patterns amongst Competing Task Frequencies: Super-Linearities, and the Almond-DG model* PAKDD 2013, Gold Coast, Queensland, Australia, April 2013.

C212. Yasuko Matsubara, Lei Li, Evangelos E. Papalexakis, David Lo, Yasushi Sakurai, Christos Faloutsos *F-Trail: Finding Patterns in Taxi Trajectories,* PAKDD 2013, Gold Coast, Queensland, Australia, April 2013

C213. Alex Beutel, Wanhong Xu, Venkatesan Guruswami, Christopher Palow, and Christos Faloutsos *Copy-Catch: Stopping Group Attacks by Spotting Lockstep* Behavior in Social Networks WWW 2013, Rio de Janeiro, Brazil, May 2013.

C214. Pedro Olmo Vaz de Melo, Christos Faloutsos, Renato Assuncao and Antonio Loureiro. *The Self-Feeding Process: A Unifying Model for Communication Dynamics in the Web* WWW 2013, Rio de Janeiro, Brazil, May 2013.

C215. Leman Akoglu, Rishi Chandy, and Christos Faloutsos *Opinion Fraud Detection in Online Reviews using Network Effects* ICWSM 2013, Cambridge, MA, July 8-10, 2013.

C216. Bin Fu, Jialiu Lin, Lei Li, Christos Faloutsos, Jason Hong, and Norman Sadeh *Why People Hate Your App - Making Sense of User Feedback in a Mobile App Store* (IG track) KDD 2013, Chicago, IL, USA, Aug 2013.

C217. Ted E. Senator, Henry G. Goldberg, Alex Memory, William T. Young, Brad Rees, Robert Pierce, Daniel Huang, Matthew Reardon, David A.Bader, Edmond Chow, Irfan Essa, Joshua Jones, Vinay Bettadapura, Duen Horng Chau, Oded Green, Oguz Kaya, Thomas G. Dietterich, Alan Fern, Weng-Keen Wong, Shubhomoy Das, Andrew Emmott, Jed Irvine, Daniel Corkill, Lisa Friedland, Amanda Gentzel, David Jensen, Jay-Yoon Lee, Danai Koutra, and Christos Faloutsos *Detecting Insider Threats in a Real Corporate Database of Computer Usage Activities* (IG track) KDD 2013, Chicago, IL, USA, Aug 2013.

C218. Michele Berlingerio, Danai Koutra, Tina Eliassi-Rad and Christos Faloutsos *Network Similarity via Multiple Social Theories* ASONAM, 2013, Niagara Falls, Ontario, Canada.

C219. Evangelos E. Papalexakis, Tudor Dumitras, Duen Horng Chau, B. Aditya Prakash and Christos Faloutsos *Spatio-temporal Mining of Software Adoption and Penetration* ASONAM, 2013, (industrial track - full paper), Niagara Falls, Ontario, Canada, Aug. 2013.

C220. Dana Movshovitz-Attias, Yair Movshovitz-Attias, Peter Steenkiste and Christos Faloutsos *Analysis of the Reputation System and User Contributions on a Question Answering Website: StackOverflow* ASONAM, 2013, (industrial track - full paper), Niagara Falls, Ontario, Canada, Aug. 2013.

C221. Stephan Guennemann and Christos Faloutsos *Mixed Membership Subspace Clustering* ICDM 2013, Dallas, TX, USA, Dec. 2013.

C222. Christina Christodoulakis, Christos Faloutsos and Renee Miller *VoidWiz: Resolving Incompleteness Using Networks Effects* ICDE 2014 (demo), Chicago, IL, April 2014.

C223. Yasuko Matsubara, Yasushi Sakurai, and Christos Faloutsos *AutoPlait: Automatic Mining of Co-evolving Time Sequences* SIGMOD'14, Snowbird, Utah, USA, June 22-27, 2014.

C224. U Kang, Jay-Yoon Lee, Danai Koutra, Christos Faloutsos, *Net-Ray: Visualizing and Mining Web-Scale Graphs* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C225. Yibin Lin, Agha Ali Raza, Jay-Yoon Lee, Danai Koutra, Roni Rosenfeld, Christos Faloutsos, *Influence Propagation: Patterns, Model and a Case Study* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C226. Da-Cheng Juan, Lei Li, Huan-Kai Peng, Diana Marculescu, and Christos Faloutsos *Beyond Poisson: Modeling Inter-Arrival Times of Requests in a Datacenter* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C227. Tobias Koetter, Stephan Guennemann, Michael R. Berthold, and Christos Faloutsos, *Fault-tolerant Concept Detection in Information Networks* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C228. Meng Jiang, Peng Cui, Alex Beutel, Christos Faloutsos, and Shiqiang Yang, *Inferring Strange Behavior from Connectivity Pattern in Social Networks* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C229. Miguel Araujo, Spiros Papadimitriou, Stephan Guennemann, Christos Faloutsos, Prithwish Basu, Ananthram Swami, Evangelos Papalexakis, and Danai Koutra, *Com2: Fast Automatic Discovery of Temporal ('Comet') Communities* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C230. Ching-Hao Mao, Chung-Jung Wu, Evangelos Papalexakis, and Christos Faloutsos, *MalSpot: Multi-2 Malicious Network Behavior Patterns Analysis* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.

C231. Nikou Guennemann, Stephan Guennemann and Christos Faloutsos *WWW 2014, Seoul, Korea, April 7-14, 2014.*

C232. Alex Beutel, Kenton Murray, Christos Faloutsos and Alexander J. Smola *CoBaFi: Collaborative Bayesian Filter* WWW 2014, Seoul, Korea, April 7-14, 2014.

C233. Danai Koutra, U Kang, Jilles Vreeken, and Christos Faloutsos *VoG: Summarizing and Understanding Large Graphs* SDM 2014, Philadelphia, PA, USA, April 24-26, 2014.

C234. Evangelos Papalexakis, Tom Mitchell, Nicholas Sidiropoulos, Christos Faloutsos, Partha Talukdar, and Brian Murphy *Turbo-SMT: Accelerating Coupled Sparse Matrix-Tensor Factorizations by 200x,* SDM 2014, Philadelphia, PA, USA, April 24-26, 2014.

C235. Alex Beutel, Abhimanu Kumar, Evangelos Papalexakis, Partha Pratim Talukdar, Christos Faloutsos, and Eric Xing *FlexiFaCT: Scalable Flexible Factorization of Coupled Tensors on Hadoop,* SDM 2014, Philadelphia, PA, USA, April 24-26, 2014.

C236. Nikolaos D Sidiropoulos, Evangelos Papalexakis and Christos Faloutsos *A Parallel Algorithm for Big Tensor Decomposition Using Randomly Compressed Cubes (PARACOMP)* ICASSP 2014, Florence, Italy, May 4-9, 2014.

C237. Yang Weng, Christos Faloutsos, Marija Ilic, and Rohit Negi *Speed up of Data-Driven State Estimation Using Low-Complexity Indexing Method* IEEE PES General Meeting, National Harbor, MD, USA, July 27-31, 2014.

C238. Stephan Guennemann, Nikou Guennemann, and Christos Faloutsos, *Detecting Anomalies in Dynamic Rating Data via Temporally Constrained Categorical Mixture Models* KDD 2014, New York City, NY, USA, Aug. 24-27, 2014.

C239. Yasuko Matsubara, Yasushi Sakurai, Willem van Panhuis, and Christos Faloutsos *FUNNEL: Automatic Mining of Spatially Coevolving Epidemics* KDD 2014, New York City, NY, USA, Aug. 24-27, 2014.

C240. Meng Jiang, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang, *CatchSync: Catching Synchronized Behavior in Large Directed Graphs* KDD 2014, New York City, NY, USA, Aug. 24-27, 2014.

C241. Evangelos Papalexakis, Alona Fyshe, Nicholas Sidiropoulos, Partha Talukdar Tom Mitchell, and Christos Faloutsos *Good-Enough Brain Model: Challenges, Algorithms and Discoveries in Multi-Subject Experiments* KDD 2014, New York City, NY, USA, Aug. 24-27, 2014.

C242. Qiang Qu, Siyuan Liu, Christian Jensen, Feida Zhu, and Christos Faloutsos, *Interestingness-driven Diffusion Process Summarization in Dynamic Networks* ECML/PKDD, Nancy, France, Sept. 15-19, 2014.

C243. Miguel Araujo, Stephan Guennemann, Gonzalo Mateos, and Christos Faloutsos, *Beyond Blocks: Hyperbolic Community Detection* ECML/PKDD, Nancy, France, Sept. 15-19, 2014.

C244. Flavio Figueiredo, Jussara Almeida, Christos Faloutsos, Bruno Ribeiro, and Yasuko Matsubara *Revisit Behavior in Social Media: The Phoenix-R Model and Discoveries* ECML/PKDD, Nancy, France, Sept. 15-19, 2014.

C245. Leman Akoglu, Rohit Khandekar, Vibhore Kumar, Srinivasan Parthasarathy, Deepak Rajan, Kun-Lung Wu, and Christos Faloutsos, *Fast Nearest Neighbor Search on Large Time-Evolving Graphs* ECML/PKDD, Nancy, France, Sept. 15-19, 2014.

C246. Neil Shah, Alex Beutel, Brian Gallagher, Christos Faloutsos *Spotting Suspicious Link Behavior with fBox: An Adversarial Perspective* ICDM 2014, Shenzhen, CN, Dec. 2014.

C247. Yuto Yamaguchi, Christos Faloutsos and Hiroyuki Kitagawa, *OMNI-Prop: Seamless Node Classification on Arbitrary Label Correlation* AAAI-15, Austin Texas, USA, Jan. 25-29 2015.

C248. Yasuko Matsubara, Yasushi Sakurai, and Christos Faloutsos, *The Web as a Jungle:* Non-Linear

Dynamical Systems for Co-evolving Online Activities WWW-2015, Florence, Italy, May 18-22 2015.

C249. Yuto Yamaguchi, Mitsuo Yoshida, Christos Faloutsos, and Hiroyuki Kitagawa, *Why Do You Follow Him? Multilinear Analysis on Twitter* WWW 2015 (poster track), Florence, Italy, May 18-22, 2015.

C250. Tobias Koetter, Stephan Guennemann, Michael R. Berthold, and Christos Faloutsos *Extracting Taxonomies from Bipartite Graphs*, WWW 2015 (poster track), Florence, Italy, May 18-22, 2015.

C251. Kejun Huang, Nicholas D. Sidiropoulos, Evangelos E. Papalexakis, Christos Faloutsos, Partha Pratim Talukdar, and Tom Mitchell *Principled Neuro-Functional Connectivity Discovery* SDM 2015, Vancouver, BC, Canada, April 30 - May 2, 2015.

C252. Yuto Yamaguchi, Christos Faloutsos, and Hiroyuki Kitagawa, *SocNL: Bayesian Label Propagation with Confidence* PAKDD'15, Ho Chi Minh City, Vietnam, May 19-22, 2015.

C253. Maria Giatsoglou, Despoina Chatzakou, Neil Shah, Alex Beutel, Christos Faloutsos, and Athena Vakali, *ND-SYNC: Detecting Synchronized Fraud Activities* PAKDD'15, Ho Chi Minh City, Vietnam, May 19-22, 2015.

C254. Maria Giatsoglou, Despoina Chatzakou, Neil Shah, Christos Faloutsos, and Athena Vakali, *Retweeting activity on Twitter: Signs of Deception* PAKDD'15, Ho Chi Minh City, Vietnam, May 19-22, 2015.

C255. Maria Giatsoglu, Despoina Chatzakou, Neil Shah, Alex Beutel, Christos Faloutsos, and Athena Vakali *Spotting Fake Retweeting Activity in Twitter* ICCSS, Helsinki, Finland, June 8-11, 2015.

C256. Yuto Yamaguchi, Mitsuo Yoshida, Christos Faloutsos and Hiroyuki Kitagawa, *Patterns in Interactive Tagging Networks* ICWSM, Oxford, UK, May 26-29, 2015.

C257. Inah Jeon, Evangelos E. Papalexakis, U Kang, and Christos Faloutsos, *HaTen2: Billion-scale Tensor Decompositions*, ICDE'15, Seoul, Korea, April 2015.

C258. Evangelos E. Papalexakis, and Christos Faloutsos, *Fast Efficient and Scalable Core Consistency Diagnostic for the PARAFAC Decomposition for Big Sparse Tensors*, IEEE ICASSP 2015, Brisbane, Australia, April 2015.

C259. Noboru Matsuda, Tadanobu Furukawa, Norman Bier and Christos Faloutsos, *Machine beats experts: Automatic discovery of skill models for data-driven online courseware refinement* EDM 2015, Madrid, Spain, June 2015.

C260. Alceu Ferraz Costa, Yuto Yamaguchi, Christos Faloutsos, Agma Traina, and Caetano Traina Jr., *RSC: Mining and Modeling Temporal Activity in Social Media* KDD 2015, Sydney, Australia, Aug. 2015.

C261. Neil Shah, Danai Koutra, Tianmin Zou, Brian Gallagher, and Christos Faloutsos, *TimeCrunch: Interpretable Dynamic Graph Summarization* KDD 2015, Sydney, Australia, Aug. 2015.

C262. Pravallika Devineni, Danai Koutra, Michalis Faloutsos, and Christos Faloutsos, *If walls could talk: Patterns and anomalies in Facebook wallposts* ASONAM 2015, Paris, France, Aug. 2015

C263. Matt Gardner, Kejun Huang, Evangelos Papalexakis, Xiao Fu, Partha Talukdar, Christos Faloutsos, Nicholas Sidiropoulos, and Tom Mitchell, *Translation Invariant Word Embeddings* EMNLP 2015, Lisboa, Portugal, Sept. 19-21, 2015.

C264. Tobias Koetter, Stephan Guennemann, Michael R. Berthold, and Christos Faloutsos, *Automatic Taxonomy Extraction from Bipartite Graphs*, ICDM 2015, Atlantic City, NJ, USA, Nov. 14-17, 2015.

C265. Meng Jiang, Bryan Hooi, Alex Beutel, Shiqiang Yang, Peng Cui, and Christos Faloutsos *General Suspiciousness Metric for Dense Blocks in Multimodal Data*, ICDM 2015, Atlantic City, NJ, USA, Nov. 14-17, 2015.

C266. Bryan Hooi, Hyun Ah Song, Evangelos Papalexakis, Rakesh Agrawal, and Christos Faloutsos, *Matrices, Compression, Learning Curves: formulation, and GROUPNTEACH algorithms* PAKDD 2016, Auckland, New Zealand, April 19-22, 2016.

C267. Miguel Araujo, Pedro Ribeiro, and Christos Faloutsos, *FastStep: Scalable Boolean Matrix Decomposition* PAKDD 2016, Auckland, New Zealand, April 19-22, 2016.

C268. Yasuko Matsubara, Yasushi Sakurai, and Christos Faloutsos *Non-Linear Mining of Competing Local Activities*, WWW 2016, Montreal, Canada, April 11-15, 2016.

C269. Flavio Figueiredo, Bruno Ribeiro, Jussara Almeida and Christos Faloutsos, *TribeFlow: Mining & Predicting User Trajectories*, WWW 2016, Montreal, Canada, April 11-15, 2016.

C270. Bryan Hooi, Neil Shah, Alex Beutel, Stephan Guenneman, Leman Akoglu, Mohit Kumar, Disha Makhija, and Christos Faloutsos *BIRDNEST: Bayesian Inference for Ratings-Fraud Detection* SDM'16, Miami FL, May 5-7, 2016.

C271. Yuto Yamaguchi, Christos Faloutsos, and Hiroyuki Kitagawa *CAMLP: Confidence-Aware Modulated*

Label Propagation SDM'16, Miami FL, May 5-7, 2016.

C272. Huy Hang, Adnan Bashir, Michalis Faloutsos, Christos Faloutsos, and Tudor Dumitras, *Infect-me-not: A User-centric and Site-centric Study of Web-Based Malware* IFIP Networking, Vienna, Austria, May 17-19, 2016.

C273. Venkata Krishna Pillutla, Zhanpeng Fang, Pravallika Devineni, Christos Faloutsos and Danai Koutra *On Skewed Multi-dimensional Distributions: the FusionRP Model, Algorithms, and Discoveries* SDM'16, Miami FL, May 5-7, 2016.

C274. Bryan Hooi, Hyun Ah Song, Alex Beutel, Neil Shah, Kijung Shin, and Christos Faloutsos. *FRAUDAR: Bounding Graph Fraud in the Face of Camouflage* (full paper). KDD'16, San Francisco, CA USA, Aug. 2016. (received *best research paper* award).

C275. Meng Jiang, Christos Faloutsos, and Jiawei Han *CatchTartan: Representing and Summarizing Dynamic Multicontextual Behaviors* (full paper). KDD'16, San Francisco, CA USA, Aug. 2016.

C276. Chengxi Zang, Peng Cui, and Christos Faloutsos, *Beyond Sigmoids: the NetTide Model for Social Network Growth, and its Applications* (poster). KDD'16, San Francisco, CA USA, Aug. 2016.

C277. Tianyang Zhang, Peng Cui, Christos Faloutsos, Wenwu Zhu, and Shiqiang Yang. *Come-and-Go Patterns of Group Evolution: A Dynamic Model* (full paper). KDD'16, San Francisco, CA USA, Aug. 2016.

C278. Kijung Shin, Bryan Hooi, and Christos Faloutsos *M-Zoom: Fast Dense-Block Detection in Tensors with Quality Guarantees* ECML/PKDD 2016, Riva del Garda, Italy, Sept. 19-23, 2016

C279. Priya Govindan, Sucheta Soundarajan, Tina Eliassi-Rad, and Christos Faloutsos *NIMBLECORE: A Space-efficient External Memory Algorithm for Estimating Core Numbers,* (full paper). ASONAM, San Francisco, CA USA, Aug. 2016.

C280. Kijung Shin, Tina Eliassi-Rad, and Christos Faloutsos *CoreScope: Graph Mining Using k-Core Analysis - Patterns, Anomalies, and Algorithms* ICDM, Barcelona, Spain, Dec. 13-15, 2016.

C281. Srijan Kumar, Francesca Spezzano, VS Subrahmanian, and Christos Faloutsos *Edge Weight Prediction in Weighted Signed Networks* ICDM, Barcelona, Spain, Dec. 13-15, 2016.

C282. Kejun Huang, Xiao Fu, Evangelos Papalexakis, Hyun Ah Song, Partha Talukdar, Nikos Sidiropoulos, Christos Faloutsos, and Tom Mitchell, *Efficient and Distributed Algorithms for Large-Scale Generalized Canonical Correlations Analysis* ICDM, Barcelona, Spain, Dec. 13-15, 2016.

C283. Alceu Ferraz Costa, Agma Juci Machado Traina, Caetano Traina Jr., and Christos Faloutsos *Vote-and-Comment: Modeling the Coevolution of User Interactions in Social Voting Web Sites* ICDM, Barcelona, Spain, Dec. 13-15, 2016.

C284. Kijung Shin, Bryan Hooi, Jisu Kim, and Christos Faloutsos, *D-Cube: Dense-Block Detection in Terabyte-Scale Tensors* WSDM, Cambridge, UK, Feb. 2017.

C285. Jinoh Oh, Kijung Shin, Vagelis Papalexakis, Christos Faloutsos, and Hwanjo Yu, *S-HOT: Scalable High-Order Tucker Decomposition,* WSDM, Cambridge, UK, Feb. 2017.

C286. Dhivya Eswaran, Stephan Guennemann, and Christos Faloutsos, *ZooBP: Belief Propagation for Heterogeneous Networks,* VLDB'17 / PVLDB, vol 10, Munich, Germany, Aug. 2017.

C287. Tsubasa Takahashi, Bryan Hooi, and Christos Faloutsos, *AutoCyclone: Automatic Mining of Cyclic Online Activities with Robust Tensor Factorization,* WWW 2017, Perth, Australia, 3-7 April 2017.

C288. Dhivya Eswaran, Stephan Guennemann, and Christos Faloutsos, *The Power of Certainty: A Dirichlet-Multinomial Model for Belief Propagation,* SDM 2017, Houston, Texas, April 2017.

C289. Daniel Chino, Alceu Costa Ferraz, Agma Traina, and Christos Faloutsos, *VolTime: Unsupervised Anomaly Detection on Users' Online Activity Volume,* SDM 2017, Houston, Texas, April 2017.

C290. Zongge Liu, Hyun Ah Song, Vladimir Zadorozhny, Christos Faloutsos, and Nikos Sidiropoulos, *H-Fuse: Efficient Fusion of Aggregated Historical Data,* SDM 2017, Houston, Texas, April 2017.

C291. Xiao Fu, Kejun Huang, Otilia Stretcu, Hyun Ah Song, Evangelos Papalexakis, Partha Talukdar, Tom Mitchell, Nikos Sidiropoulos, and Christos Faloutsos, *BRAINZOOM: High Resolution Reconstruction from Multi-modal Brain Signals,* SDM 2017, Houston, Texas, April 2017.

C292. Reihaneh Rabbany, Dhivya Eswaran, Artur Dubrawski, and Christos Faloutsos, *Beyond Assortativity: Proclivity Index for Attributed Networks (ProNe)* PAKDD'17, Jeju Island, S. Korea, May 23-26, 2017.

C293. Danai Koutra, Abhilash Dighe, Smriti Bhagat, Udi Weinsberg, Stratis Ioannidis, Christos Faloutsos, and Jean Bolot *PNP: Fast Path Ensemble Method for Movie Design,* (Applied science track), KDD, Halifax, Nova Scotia, Canada, Aug. 2017.

C294. Chengxi Zang, Peng Cui, Christos Faloutsos, and Wenwu Zhu, *Long Short Memory Process: Modeling*

Growth Dynamics of Microscopic Social Connectivity KDD, Halifax, Nova Scotia, Canada, Aug. 2017.

C295. Kijung Shin, Bryan Hooi, Jisu Kim, and Christos Faloutsos *DenseAlert: Incremental DenseÂSubtensor Detection in Tensor Streams,* KDD, Halifax, Nova Scotia, Canada, Aug. 2017.

C296. Da-Cheng Juan, Neil Shah, Mingyu Tang, Zhiliang Qian, Diana Marculescu, Christos Faloutsos: *M3A: Model, MetaModel and Anomaly Detection for Inter-arrivals of Web Searches and Postings.* DSAA 2017: 341-350

C297. Angen Zheng, Alexandros Labrinidis, Christos Faloutsos: *Skew-Resistant Graph Partitioning.* ICDE 2017: 151-154

C298. Hyun Ah Song, Fan Yang, Zongge Liu, Wilbert Van Panhuis, Nicholas D. Sidiropoulos, Christos Faloutsos, Vladimir Zadorozhny: *GB-R: A Fast and Effective Gray-Box Reconstruction of Cascade Time-Series.* ICDM Workshops 2017: 494-501

C299. Sang-Chul Lee, Christos Faloutsos, Dong-Kyu Chae, Sang-Wook Kim: *On Detecting Frauds in Comparison-Shopping Services.* WWW (Companion Volume) 2017: 811-812

C300. Chengxi Zang, Peng Cui, Chaoming Song, Christos Faloutsos, Wenwu Zhu: *Quantifying Structural Patterns of Information Cascades.* WWW (Companion Volume) 2017: 867-868

C301. Marko Jereminov, Amritanshu Pandey, Hyun Ah Song, Bryan Hooi, Christos Faloutsos, and Larry Pileggi, *Linear Load Model for Robust Power System Analysis* IEEE PES ISGT Europe 2017, Torino, Italy, Sept. 26-29, 2017.

C302. Bryan Hooi, Shenghua Liu, Asim Smailagic, and Christos Faloutsos, *BeatLex: Summarizing and Forecasting Time Series with Patterns,* ECML/PKDD, Skopje, Macedonia, Sept. 18-22, 2017.

C303. Hemank Lamba, Bryan Hooi, Kijung Shin, Christos Faloutsos, and Juergen Pfeffer, *zooRank: Ranking Suspicious Activities in Time-Evolving Tensors,* ECML/PKDD, Skopje, Macedonia, Sept. 18-22, 2017.

C304. Hyun Ah Song, Bryan Hooi, Marko Jereminov, Amritanshu Pandey, Larry Pileggi, and Christos Faloutsos, *PowerCast: Mining and Forecasting Power Grid Sequences,* ECML/PKDD, Skopje, Macedonia, Sept. 18-22, 2017.

C305. Miguel Ramos de Araujo, Pedro Manual Pinto Ribeiro, Christos Faloutsos *TensorCast: Forecasting with Context using Coupled Tensors* ICDM, New Orleans, LA, USA, Nov. 18-21. (Best research paper award)

C306. Neil Shah, Hemank Lamba, Alex Beutel, and Christos Faloutsos, *The many Faces of Link Fraud* ICDM, New Orleans, LA, USA, Nov. 18-21.

C307. Sebastian Goebl, Srijan Kumar, and Christos Faloutsos, *Spectral Lens: Explainable Diagnostics, Tools and Discoveries in Directed, Weighted Graphs,* ICDM, New Orleans, LA, USA, Nov. 18-21.

C308. Pedro Costa, Aurlio Campilho, Bryan Hooi, Asim Smailagic, Kris Kitani, Shenghua Liu, Christos Faloutsos and Adrian Galdran *EyeQual: Accurate, Explainable, Retinal Image Quality Assessment,* ICMLA 2017 , Cancun Mexico, Dec. 18-21, 2017.

C309. Srijan Kumar, Bryan Hooi, Disha Makhija, Mohit Kumar, Christos Faloutsos, and V.S. Subrahmanian. *REV2: Fraudulent User Prediction in Rating Platforms.* WSDM, 2018, Los Angeles, CA, USA, Feb. 5-9, 2018.

C310. Bryan Hooi, Hyun Ah Song, Amritanshu Pandey, Marko Jereminov, Larry Pileggi, and Christos Faloutsos. *StreamCast: Fast and Online Mining of Power Grid Time Sequences.* SIAM Data Mining (SDM), San Diego, CA, USA, May 3-5, 2018 (to appear).

C311. Kijung Shin, Euiwoong Lee, Jinoh Oh, Mohammad Hammoud, and Christos Faloutsos, *Tri-Fly: Distributed Estimation of Global and Local Triangle Counts in Graph Streams* PAKDD 2018, Melbourne, Australia, June 3-6, 2018.

C312. Shenghua Liu, Bryan Hooi, Christos Faloutsos: *HoloScope: Topology-and-Spike Aware Fraud Detection.* CIKM 2017: 1539-1548 Singapore, Nov 6-10, 2017.

C313. Fan Yang, Hyun Ah Song, Zongge Liu, Christos Faloutsos, Vladimir Zadorozhny, and Nicholas Sidiropoulos, *Ares: Automatic Disaggregation of Historical Data* ICDE 2018, Paris, France, April 16-19, 2018.

C314. Rakshit Trivedi, Bunyamin Sisman, Xin Luna Dong, Christos Faloutsos, Jun Ma and Hongyuan Zha *LinkNBed: Multi-Graph Representation Learning with Entity Linkage* ACL 2018, Melbourne, Australia, July 15-20, 2018.

C315. Dhivya Eswaran, Christos Faloutsos, Sudipto Guha, and Nina Mishra, *SpotLight: Detecting Anomalies in Streaming Graphs* KDD 2018, London, UK, Aug. 19-23, 2018.

C316. Serene W. H. Wong, Chiara Pastrello, Max Kotlyar, Christos Faloutsos, Igor Jurisica: *SDREGION: Fast*

Spotting of Changing Communities in Biological Networks. KDD 2018: 867-875

C317. Miguel Araujo, Pedro Ribeiro, and Christos Faloutsos, *TensorCast: forecasting time-evolving networks with contextual information*, IJCAI-ECAI-18, Stockholm, Sweden, July 13-19, 2018.

C318. Aastha Nigam, Kijung Shin, Ashwin Bahulkar, Bryan Hooi, David Hachen, Boleslaw Szymanski, Christos Faloutsos, and Nitesh Chawla *ONE-M: Modeling the Co-evolution of Opinions and Network Connections* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018.

C319. Kijung Shin, Jisu Kim, Bryan Hooi, and Christos Faloutsos *Think before You Discard: Accurate Triangle Counting in Graph Streams with Deletions* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018.

C320. Dhivya Eswaran, Reihaneh Rabbany, Artur Dubrawski, Christos Faloutsos *Social-Affiliation Graphs: Patterns and the SOAR Model* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018.

C321. Bryan Hooi, Dhivya Eswaran, Hyun Ah Song, Amritanshu Pandey, Marko Jereminov, Larry Pileggi, Christos Faloutsos *GridWatch: Sensor Placement and Anomaly Detection in the Electrical Grid* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018. *(best student paper award - runner-up).*

C322. Nikhil Gupta, Dhivya Eswaran, Neil Shah, Leman Akoglu, Christos Faloutsos *Beyond Anomaly Detection: LookOut for Pictorial Explanation* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018.

C323. Dhivya Eswaran, Christos Faloutsos *SedanSpot: Detecting Anomalies in Edge Streams* ICDM 2018, Singapore, Nov. 17-20, 2018.

C324. Bryan Hooi, Leman Akoglu, Dhivya Eswaran, Amritanshu Pandey, Marko Jereminov, Larry Pileggi, Christos Faloutsos *ChangeDAR: Online Localized Change Detection for Sensor Data on a Graph* CIKM 2018, Turin, Italy, Oct. 22-26, 2018.

C325. Dongha Lee, Jinoh Oh, Christos Faloutsos, Byungju Kim, Hwanjo Yu: *Disk-based Matrix Completion for Memory Limited Devices.* CIKM 2018: 1093-1102

C326. Dhivya Eswaran, Christos Faloutsos, Nina Mishra, Yonatan Naamad: *Intervention-Aware Early Warning.* ICDM 2019: 1030-1035

C327. Namyong Park, Andrey Kan, Xin Luna Dong, Tong Zhao, Christos Faloutsos: *Estimating Node Importance in Knowledge Graphs Using Graph Neural Networks.* KDD 2019: 596-606.

C328. Minji Yoon, Bryan Hooi, Kijung Shin, Christos Faloutsos: *Fast and Accurate Anomaly Detection in Dynamic Graphs with a Two-Pronged Approach.* KDD 2019: 647-657.

C329. Wenjie Feng, Shenghua Liu, Christos Faloutsos, Bryan Hooi, Huawei Shen, Xueqi Cheng: *Beyond Outliers and on to Micro-clusters: Vision-Guided Anomaly Detection.* PAKDD (1) 2019: 541-554.

C330. Bryan Hooi, Christos Faloutsos: *Branch and Border: Partition-Based Change Detection in Multivariate Time Series.* SDM 2019: 504-512.

C331. Bryan Hooi, Kijung Shin, Shenghua Liu, Christos Faloutsos: *SMF: Drift-Aware Matrix Factorization with Seasonal Patterns.* SDM 2019: 621-629

C332. Wei Zhang, Hao Wei, Bunyamin Sisman, Xin Luna Dong, Christos Faloutsos and David Page *Auto-Block: A Hands-off Blocking Framework for Entity Matching* WSDM 2020, Houston TX, USA, Feb. 3-7, 2020.

C333. Siddharth Bhatia, Bryan Hooi, Minji Yoon, Kijung Shin, Christos Faloutsos: *Midas: Microcluster-Based Detector of Anomalies in Edge Streams.* AAAI 2020: 3242-3249

C334. Bryan Hooi, Kijung Shin, Hemank Lamba, Christos Faloutsos: *TellTail: Fast Scoring and Detection of Dense Subgraphs.* AAAI 2020: 4150-4157

C335. Varun Embar, Bunyamin Sisman, Hao Wei, Xin Luna Dong, Christos Faloutsos, Lise Getoor: *Contrastive Entity Linkage: Mining Variational Attributes from Large Catalogs for Entity Linkage.* AKBC 2020.

C336. Junheng Hao, Tong Zhao, Jin Li, Xin Luna Dong, Christos Faloutsos, Yizhou Sun, Wei Wang: *P-Companion: A Principled Framework for Diversified Complementary Product Recommendation.* CIKM 2020: 2517-2524

C337. Namyong Park, Andrey Kan, Xin Luna Dong, Tong Zhao, Christos Faloutsos: *MultiImport: Inferring Node Importance in a Knowledge Graph from Multiple Input Signals.* KDD 2020: 503-512

C338. Yuning Mao, Tong Zhao, Andrey Kan, Chenwei Zhang, Xin Luna Dong, Christos Faloutsos, Jiawei Han: *Octet: Online Catalog Taxonomy Enrichment with Self-Supervision.* KDD 2020: 2247-2257

C339. Xin Luna Dong, Xiang He, Andrey Kan, Xian Li, Yan Liang, Jun Ma, Yifan Ethan Xu, Chenwei Zhang, Tong Zhao, Gabriel Blanco Saldana, Saurabh Deshpande, Alexandre Michetti Manduca, Jay Ren, Surender Pal Singh, Fan Xiao, Haw-Shiuan Chang, Giannis Karamanolakis, Yuning Mao, Yaqing Wang,

Christos Faloutsos, Andrew McCallum, Jiawei Han: *AutoKnow: Self-Driving Knowledge Collection for Products of Thousands of Types.* KDD 2020: 2724-2734

C340. Ilias Dimitriadis, Marinos Poiitis, Christos Faloutsos, Athena Vakali: *TRIAGE: Temporal Twitter attribute graph patterns.* WIMS 2020: 44-53

C341. Qi Zhu, Hao Wei, Bunyamin Sisman, Da Zheng, Christos Faloutsos, Xin Luna Dong, Jiawei Han: *Collective Multi-type Entity Alignment Between Knowledge Graphs.* WWW 2020: 2241-2252

C342. Dhivya Eswaran, Srijan Kumar, Christos Faloutsos: *Higher-Order Label Homogeneity and Spreading in Graphs. WWW 2020: 2493-2499*

C343. Meng-Chieh Lee, Qi Zhu, Costas Mavromatis, Zhen Han, Soji Adeshina, Vassilis N. Ioannidis, Huzefa Rangwala, Christos Faloutsos: *HybGRAG: Hybrid Retrieval-Augmented Generation on Textual and Relational Knowledge Bases. ACL (1) 2025: 879-893.*

C344. Jiaming Liang, Chuan Lei, Xiao Qin, Jiani Zhang, Asterios Katsifodimos, Christos Faloutsos, Huzefa Rangwala: *Featpilot: Automatic Feature Augmentation on Tabular Data.* ICDE 2025: 2148-2160.

C345. Karish Grover, Haiyang Yu, Xiang Song, Qi Zhu, Han Xie, Vassilis N. Ioannidis, Christos Faloutsos: *Spectro-Riemannian Graph Neural Networks.* ICLR 2025.

C346. Karish Grover, Geoffrey J. Gordon, Christos Faloutsos: *CurvGAD: Leveraging Curvature for Enhanced Graph Anomaly Detection.* ICML 2025.

C347. Luca Masserano, Abdul Fatir Ansari, Boran Han, Xiyuan Zhang, Christos Faloutsos, Michael W. Mahoney, Andrew Gordon Wilson, Youngsuk Park, Syama Sundar Rangapuram, Danielle C. Maddix, Bernie Wang: *Enhancing Foundation Models for Time Series Forecasting via Wavelet-based Tokenization.* ICML 2025.

C348. Xuming Hu, Chuan Lei, Xiao Qin, Asterios Katsifodimos, Christos Faloutsos, Huzefa Rangwala: *PolyJoin: Semantic Multi-key Joinable Table Search in Data Lakes.* NAACL (Findings) 2025: 384-395.

C349. Minyoung Choe, Jihoon Ko, Taehyung Kwon, Kijung Shin, Christos Faloutsos: *Kronecker Generative Models for Power-Law Patterns in Real-World Hypergraphs.* WWW 2025: 1261-1272.

RELEASED SOFTWARE.

1. Christos Faloutsos, Mehmet Bayraktar, Yik Tan, Xuejun Tang and Wen Wang *DR-tree and DR-tree2* An implementation of the 'Deferred-Split' R-tree a spatial access method for multi-dimensional points. Released through the Office of Technology Liaison (OTL), University of Maryland, College Park; Dec. 1994, May 1996 (University of Maryland Invention Disclosure IS-96-031).
2. U Kang, Duen Horng (Polo) Chau, and Christos Faloutsos *PEGASUS* Peta-scale graph mining system. Uses ''hadoop''. Available with Apache license, since 2010. URL: *www.cs.cmu.edu/~pegasus*

PATENTS

1. Rakesh Agrawal, William Equitz, Christos Faloutsos, Myron Flickner, Arun Swami, "Method for high-dimensional indexing in a multi-media database". Patent number: 5647058, issued July 8, 1997.
2. Christos Faloutsos, Yossi Matias, Abraham Silberschatz, "Method for Characterizing Information in Data Sets Using Multifractals". Patent number: 5758338, issued May 26, 1998.
3. Christos Faloutsos, H.V. Jagadish, Philip Russell Korn, "Compressed representation of a data base that permits AD HOC querying". Patent number: 5,946,692, issued August 31, 1999.
4. Alexandros Biliris, Christos Faloutsos, H.V. Jagadish, Theodore Johnson, Nikolaos D. Sidiropoulos, Byoung-Kee Yi "Method and Apparatus for Analyzing Co-evolving Time Sequences". Patent Number: 6,055,491, issued Apr. 25, 2000.
5. Paul Bradley, Demetrios Achlioptas, Christos Faloutsos, Usama Fayyad "Method of reducing dimensionality of a set of attributes used to characterize a sparse dataset". Patent Number: 6,735,589, issued May 11, 2004.
6. Rakesh Agrawal, Roberto Bayardo, Christos Faloutsos, Jerry Kiernan, Ralf Rantzau, and Ramakrishnan Srikant, "Auditing Compliance with a Hippocratic Database". Patent number 7,810,142, issued Oct. 5, 2010.
7. Hanghang Tong, Yehuda Koren, Christos Faloutsos, "Direction-Aware Proximity for Graph Mining". Patent Number 7,925,599, issued April 12, 2011.
8. Ashwin Sridharan, Mukund Seshadri, James Schneider, B. Aditya Prakash, Christos Faloutsos, and Sridhar Machiraju, "Determining User Communities in Communication Networks". Patent Number 9,491,055, issued November 8, 2016.
9. Andrey Kan, Christos Faloutsos, and Xin Dong, "User interface for navigating related items". Patent number 10,891,676, issued Jan. 12, 2021.

10. Panagiotis Parchas, Christos Faloutsos, Anurag Windlass Gupta, Stavros Harizopoulos, and Michail Petropoulos, "Using a graph representation of join history to distribute database data", Patent number 11,500,931, issued Nov. 15, 2022.
11. Matthew Butler, Christos Faloutsos, Mina Loghavi, and Yi Fan, "Machine learning optimization for fraud detection". Patent number: 11,276,023, issued March 15, 2022.
12. Yannis Papakonstantinou, Balakrishnan Narayanaswamy, Christos Faloutsos and Vuk Ercegovac, "Rewriting queries to compensate for stale materialized views". Patent No. 11,868,347 B1, date: Jan. 9, 2024.

INVITED CONFERENCE SPEAKER

1. *"Searching Multimedia Databases by Content"* Int. Symposium on Digital Media Information Base (DMIB'97), Nara, Japan, November 26-28, 1997.
2. *"Applications, Requirements, and Databases Tools for Massive* Data Mining" CASCON'97, Data Mining Workshop, Toronto, Ontario, Canada, Nov. 11, 1997.
3. *"Applications, Requirements, and Databases Tools for Massive* Data Mining". Advances in Digital Libraries (IEEE ADL '98) Santa Barbara, CA, April 22-24, 1998.
4. *"Indexing in Multimedia Databases".* Invited Speaker, First Workshop on Multimedia Databases and Image Communication (MDIC'99), Salerno, Italy, Oct. 5 1999.
5. *"Massive dimensionality: issues and solutions"* Invited plenary speaker, NSF-IDM workshop, Roanoke, VA, Oct. 2000.
6. *"Indexing and Data Mining in Multimedia Databases"* Invited workshop speaker, Daimler-Chrysler AG, Reserch Center Ulm, Germany, Dec. 2000.
7. *"Sensor Data Mining"* Invited workshop speaker, NSF NGDM workshop, Baltimore, MD, Nov. 2002.
8. *"Finding Patterns in Large, Real Networks"* Invited workshop speaker, N.A.S. Workshop on Dynamic Social Network Analysis, Wash. DC, Nov. 2002.
9. *Multimedia Databases: Indexing, Retrieval and Data Mining* MDIC, Salerno, June 2004.

INVITED KEYNOTE SPEAKER

1. *"Searching, Data Mining and Visualization of Multimedia data"*, Conference on VISUAL DATABASE SYSTEMS (VDB5), Fukuoka, Japan, May 10-12 2000.
2. *"Multimedia Information Retrieval"*, Workshop on Computational Lexicography and Multimedia Dictionaries, COMLEX 2000, Patras, Greece, Sept. 22-23, 2000.
3. *"Future directions in Data Mining: Streams, Networks, self-similarity and power laws"*, CIKM, McLean, VA, Nov. 2002.
4. *"Next Generation Data Mining Tools: Power laws and self-similarity for graphs, streams and traditional data".* ECML, Dubrovnik, Croatia, Sept. 2003.
5. *"Advanced Data Mining Tools: Fractals and Power Laws for Graphs, Streams and Traditional Data".* SIGMOD-Japan 30-th anniversary workshop, Tokyo, Dec. 2004.
6. *"Data Mining Using Fractals" joint Asia-Pacific Web Conference and Web-Age Information Management* (APWeb/WAIM) conference, Huang Shan, China, June 2007.
7. *"Mining Large Graphs"* DBRANK workshop, within ICDE 2008, Cancun, Mexico, April 2008.
8. *"Mining Large Graphs"*, PAKDD, Osaka, Japan, May 2008.
9. *"Mining Large Graphs"*, ASONAM, Athens, Greece, July 2009.
10. *Mining Billion-node Graphs: Patterns, Generators and Tools* Network Science Day, Penn State University, April 16, 2010.
11. *Mining Billion-node Graphs* PKDD 2010 Barcelona Spain, Sept. 2010.
12. *Mining Billion-node Graphs* ICDM 2010, Sydney, Australia, Dec. 2010.
13. *Mining Billion-node Graphs* WSDM 2011, Hong Kong, China, Feb. 2011.

14. *Large Graph Mining* GraphEx, MIT Lincoln Labs, Aug. 2011.
15. *Influence propagation in graphs* GraphEx, MIT Lincoln Labs, April 2012.
16. *Large Graph Mining: Patterns, Cascades, Fraud Detection, and Algorithms.* WWW'14, Seoul, S. Korea, April 7-11, 2014.
17. *Mining Large Graphs.* ICML'16, New York, NY, June 19-24, 2016.

INVITED DISTINGUISHED LECTURES

1. *"Searching and Data Mining in Multimedia Databases"* Invited Distinguished Lecture, University of Alberta, Canada, March 19, 2001.
2. *"Searching and Data Mining in Multimedia Databases"* Distinguished Lecture Series Univ. of Southern California (USC), Los Angeles, CA, September 21, 2001.
3. *"Discovering Patterns in Streams and Graphs"* Distingushed Lecture Series, Helsinki Graduate School in Computer Science and Engineering, Aug 9-13, 2004.
4. *"Advanced Data Mining Tools: Fractals and Power laws* for graphs, streams and traditional data" Distinguished Lecture Series, Univ. of Illinois, Urbana-Champaign, Oct. 4 2004.
5. "Data Mining Using Fractals and Power Laws" Twentieth Anniversary Lecture Series, Boston University, Jan. 31, 2005.
6. "Data Mining Using Fractals and Power Laws" Triangle Computer Science Distinguished Lecturer Series (UNC, Duke, NCSU) Feb. 28, 2005.
7. "Data Mining Using Fractals and Power Laws" Wright State University, Dept. of CS Distinguished Lecturer Series March 9, 2005.
8. "Data Mining Using Fractals and Power Laws" Michigan State University, Dept. of CSE, Distinguished Lecture Series Oct. 14, 2005.
9. "Data Mining Using Fractals and Power Laws" Lehigh University, Distinguished Lecture Series Nov. 17, 2005.
10. "Data Mining Using Fractals and Power Laws" Ohio State University, Jan. 2006.
11. "Data Mining Using Fractals and Power Laws" Florida International University, Feb. 2007.
12. "Graph Mining: Laws, Generators and Tools", UC Irvine, August 8, 2008.
13. "Graph Mining: Laws, Generators and Tools", Conte Distinguished Lecture, Purdue University, Oct. 15, 2007.
14. "Mining Billion Node Graphs" Georgia Tech, April 2011.
15. "Mining Billion Node Graphs" Ted and Janice Smith Distinguished Lecture Series, UC Irvine, April 2011.
16. "Mining Billion Node Graphs" Distinguished Lecture Series, Simon Fraser University, BC, Canada, Sept. 15, 2011.
17. "Mining Billion Node Graphs - Patterns and Algorithms", Cray Distinguished Speaker Series, Univ. of Minnesota, Oct. 1, 2012.
18. "Large Graph Mining" Yahoo! Big Thinker speaker series (June 2013).
19. "Mining Large Graphs" Distinguished Lecture Series, Anniversary Edition, University of Toronto (Nov. 4, 2014).
20. "Mining Large Graph" Distinguished Lecture Series, Univ. of Illinois Chicago (April 16, 2015)
21. "Mining Large Graphs" Distinguished Lecture Series, Univ. of Southern California (April 24, 2015)
22. "Mining Large Graphs: Patterns, Anomalies, and Fraud Detection" Distinguished Guest Lecture, Arizona State University (Nov. 6, 2015).
23. "Mining Large Graphs: Patterns, Anomalies, and Fraud Detection" Distinguished Lecture Series, York University, Toronto, Ontario (Feb. 5, 2016).
24. "Mining Large Graphs: Patterns, Anomalies, and Fraud Detection" Distinguished Lecture Series, George Mason University (March 25, 2016).

25. "Mining Large Graphs: Patterns, Anomalies, and Fraud Detection" Distinguished Lecture Series, UCSD, Oct. 10, 2016.
26. "Anomaly Detection in Large Graphs" Distinguished Lecture Series, UCR, April 7, 2017.
27. "Anomaly Detection in Large Graphs" IEEE Tencent "Rhino Bird" Distinguished Lecture Series, Shenzhen, China, June 13, 2017.

INVITED LECTURES

1. *"An integrated access method for documents",* Dept. of Computer Science, Univ. of Waterloo, Canada, November 1986.
2. *"Analysis of Object Oriented Spatial Access Methods",* Research Center of Crete, Heraklion, Greece, July 1987.
3. *"Access Methods for Geometric Data",* Dept. of Electrical Engineering, National Technical University of Athens, Greece, July 1988.
4. *"Fast Text Access Methods for Optical and Large Magnetic Disks: Designs and Performance Comparison",* School of Business and Management, University of Maryland, September 1988.
5. *"Data Compression, Storage and Retrieval for Large Databases",* National Institute for Standards and Technology, April 19, 1989.
6. *"Access Methods for Text and Spatial Data Bases",* School of Business and Management, University of Maryland, April 28, 1989.
7. *"Fast text retrieval methods for optical and magnetic disks",* College of Library and Information Services, University of Maryland, May 2, 1989.
8. *"Access Methods for Text and Spatial Data Bases",* Centre Universitaire d'Informatique, University of Geneva, Switzerland, July 7, 1989.
9. *"Access Methods for Text and Spatial Data Bases",* Research Center of Crete, Heraklion, Greece, July 19, 1989.
10. *"Spatial Data Access Methods: Survey and Design Goals",* Invited talk in the 52nd Annual Meeting of the American Society for Information Science (ASIS), October 29 - November 2, 1989.
11. *"Access Methods for Spatial Data Bases",* AT&T Bell Laboratories, Murray Hill, NJ, March 23, 1990.
12. *"Access Methods for Spatial Data Bases",* U.S. Bureau of Census, May 2, 1990.
13. *"Access Methods for Text",* AT&T Bell Laboratories, Murray Hill, NJ, Jan. 18, 1991.
14. *"Parallel R-trees",* IBM Almaden Research Center, San Jose, CA, June 1992.
15. *"Access Methods for Text",* SUNSoft Inc., Billerica, MA, July 1992.
16. *"Declustering Using Fractals",* Stanford University, April 1993.
17. *"Declustering Using Fractals",* University of Arizona, Tucson AZ, June 1993.
18. *"Indexing Multimedia and Medical Databases",* University of Toronto, Ontario, Canada, March 1994.
19. *"Fast Pattern Matching in Time-series and Multimedia Databases",* Supercomputing Research Center, Bowie, MD, June 1, 1994.
20. *"Beyond Uniformity and Independence: Analysis of R-trees Using the Concept* of Fractal Dimension" Techn. University of Crete, Chanea, Greece, July 13, 1994.
21. *"Fast Subsequence Matching in Time-Series Databases"* Techn. University of Crete, Chanea, Greece, July 19, 1994.
22. *"Indexing Multimedia and Medical Databases"* Nat. Inst. of Standards and Technology (NIST), Gaithersburg, MD, September 26, 1994.
23. *"Beyond Uniformity and Independence: Analysis of R-trees Using the Concept of Fractal Dimension",* IBM Almaden Research Center, San Jose, CA, Oct. 18, 1994.
24. Panel member: *"Information Filtering and Retrieval: Overview, Issues and Directions"* 26th Annual Conference of the IEEE Engineering in Medicine and Biology Society, Baltimore, MD, November 3-6, 1994.

25. *"Indexing Multimedia Data"* AT&T-GIS (TeraData), El Segundo, CA, February 14, 1995.
26. Panel member: *"Document Repositories: Databases or Information Retrieval Systems* - Are We Reinventing the Wheel?" Int. Conf. on Data Engineering, Taipei, Taiwan, March 6-10, 1995.
27. *"Indexing Multimedia Data"*, Rutgers University, NJ, April 27, 1995.
28. *"Indexing Multimedia Data"*, Columbia University, NY, June 2, 1995.
29. "Indexing Multimedia Data", AT&T Bell Laboratories, Murray Hill, NJ, June 13, 1995.
30. *"Indexing Multimedia Data"*, Brooklyn Polytechnic University, Brooklyn, NY, November 6, 1995.
31. *"Parallel R-trees"*, AT&T-GIS (TeraData), El Segundo, CA, Nov. 16, 1995.
32. *"Indexing Multimedia Databases"*, PRC Inc., McLean VA, Jan. 16, 1996.
33. *"Estimating the Selectivity of Spatial Queries Using the* 'Correlation' Fractal Dimension", University of Toronto, Canada, June 7, 1996.
34. *"Fast Searching by Content in Multimedia and Medical Image Databases"* National Library Medicine, Bethesda, MD, June 24, 1996.
35. *"Retrieval of Video by Content"* Matsushita Information Technology Laboratory, Princeton NJ, August 30, 1996.
36. *"Indexing Medical and Multimedia Databases"* Carnegie Mellon University, Pittsburgh PA, February 27, 1997.
37. *"Indexing Multimedia Databases"* The George Washington University, Washington DC, March 5, 1997.
38. *"Indexing Multimedia Databases"* ACM-UMCP chapter lecture series, April 10, 1997.
39. *"Applications, Requirements, and Databases Tools for Massive* Data Mining" IBM Yorktown Heights, Sept. 12, 1997.
40. *"Applications, Requirements, and Databases Tools for Massive* Data Mining" University of Pittsburgh, Oct. 17, 1997.
41. *"Overlay striping and optimal parallel I/O for modern applications"* Systems Design and Implementation (SDIS) seminar series, Carnegie Mellon Univ., Oct. 9, 1997.
42. *"Applications, Requirements and Database Tools for Massive Data Mining"* Center for Automated Learning and Discovery (CALD), Carnegie Mellon Univ., Oct. 24, 1997.
43. *"Applications, Requirements and Database Tools for Massive Data Mining"* CASCON'97 Data mining workshop, Toronto, Canada, Nov. 11, 1997.
44. *"Applications, Requirements and Database Tools for Massive Data Mining"* Case Western Reserve University, Cleveland, OH, March 25, 1998.
45. *"Indexing and Data Mining in Traditional and Multimedia Databases"* University of Washington, Seattle, June 8, 1998.
46. *"Indexing and Data Mining in Traditional and Multimedia Databases"* Microsoft Corporation, Redmond, WA, June 9, 1998.
47. *"Indexing and Data Mining in Traditional and Multimedia Databases"*, VASC seminars, Robotics Institute, CMU, Nov. 1998.
48. *"Data bases for fun and profit"*, Freshman Immigration Course, CMU, Sept. 28, 1999.
49. *"Fractals and power-laws for database applications"* Univ. of Salerno, Italy, Oct. 6, 1999.
50. *"Indexing and Data Mining in Traditional and Multimedia Databases"*, Dartmouth Univ., Feb. 2000.
51. *"Indexing and Mining Multimedia Databases"*, U.C. Riverside, March 3, 2000.
52. *"Indexing and Mining Multimedia Databases"* Invited talk, Internet Archive Colloquim, San Francisco, March 8, 2000.
53. *"Internet topology, data mining and power laws"* HP Labs, Palo Alto, June 2000.
54. *"Searching, Data Mining and Visualization of Multimedia Data"* Invited talk, Visual Databases VDB5, Fukuoka, Japan, May 2000.

55. *"Multimedia Information Retrieval"* Keynote talk, COMLEX 2000, Univ. of Patras, Greece, Sept. 2000.
56. *"Massive dimensionality: issues and solutions"* Plenary talk, NSF-IDM workshop, Roanoke, VA, Oct. 2000.
57. *"Searching, Data Mining and Visualization in Multimedia Databases"* Invited workshop speaker, Daimler-Chrysler, Ulm, Germany, Dec. 2000.
58. *"Data Mining Using Fractals"* IBM Almaden, August 30, 2001.
59. *"The "DGX" Distribution for Mining Massive, Skewed Data"* HP Labs, August 31, 2001.
60. *"Spatio-temporal Data Mining Using Fractals"* IBM Hawthorne, Oct. 26, 2001.
61. *"Data Mining for Massive Graphs"* Invited talk in "VWSim" (Virtual Worlds and Simulation Conference), San Antonio, January 27-31, 2002.
62. *"Modeling skewed distributions and bursty traffic"* Microsoft Research, Redmont, Aug. 7, 2002.
63. *Stream and Graph Mining* INTEL Research Lab at Berkeley, March 2004.
64. *Stream and Graph Mining* USC, April 2004.
65. *Sensor and Graph Mining,* Nokia Research Center, Helsinki Finland, Aug. 2004.
66. *Next Generation Data Mining Tools* ETH Zurich, Switzerland, Sept. 2004
67. *Data Mining Using Fractals and Power Laws* Univ. of Sao Paulo at Sao Carlos, Sao Carlos, Brazil,
68. *Graph Mining Tools* Yahoo Research, Sunnyvale, CA, Nov. 2005
69. *Data Mining Using Fractals and Power Laws* Kent State University, OH, Jan. 2007.
70. *Graph Mining* Univ. of Michigan, Ann Arbor, April 2007.
71. *Graph Mining: Laws, Generators and Tools* Georgia Tech, Atlanta, Feb. 2008.
72. *Mining Billion Node Graphs* RocData Forum, Univ. of Rochester, Oct. 2012.
73. *Large Graph Mining,* Lawrence Livermore Nat. Labs, CA, Jan. 2013.
74. *Large Graph Mining,* Wayne State University, Detroit, MI, Feb. 2013.
75. *Large Graph Mining - Patterns, Tools and Cascade Analysis* Rutgers Business School, March 2013.

TUTORIALS

1. *Indexing Multimedia Databases* Int. Conf. on Very Large Data Bases (VLDB), Santiago, Chile, Sept. 1994
2. *Indexing Multimedia Databases* ACM Multimedia Conference, San Francisco, CA, Oct. 1994.
3. *Indexing Multimedia Databases,* Int. Conf. on Date Engineering (ICDE), Taipei, Taiwan, March 1995.
4. *Indexing Multimedia Databases* ACM SIGMOD Conference, San Jose CA, May 1995.
5. *Indexing Multimedia Databases,* CIKM conference, Baltimore MD, Nov. 1995.
6. *Indexing Multimedia Databases,* EDBT Conference, Avignon, France, March 26, 1996.
7. *Indexing and Data Mining in Traditional and Multimedia Databases,* IEEE Multimedia Systems '99 (ICMCS'99), Florence Italy, June 7-11, 1999.
8. *Next generation data mining tools, using SVD and fractals,* ICDE 2001, Heidelberg, Germany, April 2-6 2001.
9. *Data Mining the Internet,* with Michalis Faloutsos, SIGCOMM 2002, Pittsburgh, PA, August 2002.
10. *Sensor data mining,* VLDB 2002, Hong Kong, August 2002.
11. *Data Mining the Internet,* with Michalis Faloutsos, INFOCOM, San Francisco, CA, March 31, 2003.
12. *Internet Research meets Data Mining: Current Knowledge and New Tools,* with Michalis Faloutsos, SIGMET-RICS 2003, San Diego, CA, June 10-14, 2003.
13. *Mining Time Series Data,* ICML 2003, Washington DC, Aug. 21, 2003
14. *Stream and Sensor Data Mining,* EDBT, Heraklion, Greece, March 2004
15. *Indexing and Mining Streams,* SIGMOD 2004, Paris France, June 2004.
16. Graph Structures in Data Mining, ACM KDD 2004, with Soumen Chakrabarti, Seattle, WA.

17. *Sensor Data Mining: Similarity Search and Pattern Analysis*, CIKM 2004 (Washington, DC), Nov. 2004.
18. *Research Issues in Protein Location Image Databases* (with Bob Murphy), SIGMOD 2005, Baltimore, MD, June 2005.
19. *Mining Time Series Data*, SBBD 2005 (Uberlandia, MG, Brazil) Oct. 3, 2005.
20. *Sensor Mining at Work: Principles and a Water Quality Case-Study* (with Jeanne VanBriesen), KDD 2006, Philadelphia, PA, August 2006.
21. *Mining Large Graphs and Streams Using Matrix and Tensor Tools* (with Tamara Kolda and Jimeng Sun) SDM 2007, Minneapolis, MN, USA, April 2007.
22. *Mining Large Graphs and Streams Using Matrix and Tensor Tools* (with Tamara Kolda and Jimeng Sun) SIGMOD 2007, Beijing, China, June 2007.
23. *Mining Large Graphs and Streams Using Matrix and Tensor Tools* (with Tamara Kolda and Jimeng Sun). ICML 2007, Cornvallis, OR, USA, June 20, 2007.
24. *Mining Large Graphs and Streams Using Matrix and Tensor Tools* (with Tamara Kolda and Jimeng Sun). KDD 2007, San Jose, August 12-15, 2007.
25. *Database Techniques with Motion Capture* (with Jessica Hodgins and Nancy Pollard) SIGGRAPH 2007, San Diego CA, USA, Aug 5-9 2007.
26. *Mining Large Graphs: Laws and tools* (with Jure Leskovec). ECML/PKDD, Warsaw, Poland, Sept. 21 2007
27. *Graph Mining Techniques for Social Media Analysis* Mary McGlohon and Christos Faloutsos, ICWSM, Seattle, WA, March 30 - April 2, 2008.
28. *Tools for large networks: Structure and difussion* (with Jure Leskovec). Full day tutorial, WWW, Beijing, China, April 2008.
29. *Large Graph Mining: Patterns, Tools and Case Studies* (with Hanghang Tong), CIKM, Napa Valley, CA, USA, Oct. 2008.
30. *Large Graph Mining: Patterns, Tools and Case Studies* (with Hanghang Tong), ICDE, Shanghai, China, April. 2009.
31. *Large Graph Mining* (with Charalampos (Babis) Tsourakakis and Gary Miller), KDD, Paris France, June 2009.
32. *Indexing and Mining Time Sequences* KDD, Washington DC, July 2010.
33. *Discovering Roles and Anomalies in Graphs: Theory and Applications* (with Tina Eliassi-Rad). SDM 2012, Anaheim, CA, April 26-28.
34. *Managing and Mining Billion-scale Graphs: Patterns and Algorithms* (with U Kang), SIGMOD 2012, Scottsdale, Arizona, USA, May 20-24, 2012.
35. *Understanding and Managing Cascades on Large Graphs* (with B. Aditya Prakash), VLDB 2012, Istanbul, Turkey, Aug. 2012.
36. *Understanding and Managing Cascades on Large Graphs* (with B. Aditya Prakash), PKDD 2012, Bristol, UK, Sept. 2012.
37. *What is Strange in Large Networks? Graph-based Irregularity and Fraud Detection* (with Leman Akoglu), ICDM 2012, Brussels, Belgium, Dec. 10-13, 2012.
38. *Anomaly, Event, and Fraud Detection in Large Network Datasets* (with Leman Akoglu), WSDM 2013, Rome Italy, Feb. 4-8, 2013.
39. Discovering Roles and Anomalies in Graphs: Theory and Applications (with Tina Eliassi-Rad), PKDD 2013.
40. *Node similarity, Graph Similarity and Matching: Theory and Applications* (with Tina Eliassi-Rad, Rutgers, and Danai Koutra, CMU) SDM 2014, Philadelphia, PA, USA, April 24-26.
41. *Node and graph similarity: theory and applications* (with Tina Eliassi-Rad, Rutgers; and Danai Koutra, CMU) ICDM 2014, Shenzhen, China, Dec. 14-17.
42. *Mining and Forecasting of Big Time-series data*, (with Yasushi Sakurai and Yasuko Matsubara), ACM SIGMOD, Melbourne, AU, June 2015.

43. *Graph-Based User Behavior Modeling: From Prediction to Fraud Detection,* (with Alex Beutel and Leman Akoglu), KDD 2015, Sydney, Australia, Aug. 2015.
44. *Mining Big Time-series Data on the Web,* Yasushi Sakurai, Yasuko Matsubara, and Christos Faloutsos, WWW'16, Montreal, Canada, April 11-15, 2016.
45. *Smart Analytics for Big Time-series Data* Yasushi Sakurai, Yasuko Matsubara, and Christos Faloutsos. KDD 2017, Halifax, Nova Scotia, Canada, Aug. 13-17, 2017.
46. *Data-Driven Approaches towards Malicious Behavior Modeling* Meng Jiang, Srijan Kumar, VS Subrahmanian, and Christos Faloutsos. KDD 2017, Halifax, Nova Scotia, Canada, Aug. 13-17, 2017.
47. *Graph and Tensor Mining for Fun and Profit* Xin Luna Dong, Christos Faloutsos, Andrey Kan, Subhabrata Mukherjee and Jun Ma. KDD 2018, London UK, Aug. 19-23, 2018.
48. *Fact checking: theory and practice.* Xin Luna Dong, Christos Faloutsos, Xian Li, Subhabrata Mukherjee, and Prashant Shiralkar, KDD 2018, London UK, Aug. 19-23, 2018.
49. *Forecasting Big Time Series: Old and News.* Christos Faloutsos, Jan Gasthaus, Tim Januschowski and Yuyang Wang, VLDB 2018, Rio De Janeiro, Brazil, Aug. 27-31, 2018.
50. *Classical and Contemporary Approaches to Big Time Series Forecasting.* Christos Faloutsos, Jan Gasthaus, Tim Januschowski and Yuyang Wang, SIGMOD 2019, Amsterdam, Netherlands, June 30 - July 5, 2019.
51. *Forecasting Big Time Series: Theory and Practice.* Christos Faloutsos, Valentin Flunkert, Jan Gasthaus, Tim Januschowski, Yuyang Wang. KDD 2019, Anchorage, Alaska, Aug 2019.
52. *Forecasting Big Time Series: Theory and Practice.* Yuyang Wang, Christos Faloutsos, Valentin Flunkert, Jan Gasthaus, Tim Januschowski. TheWebConf, Taipei Taiwan, April 20-24, 2020.
53. *Graph mining and multi- relational learning: Tools and applications.* Shobeir Fakhraei and Christos Faloutsos TheWebConf, Ljubljana, Slovenia, April 19-23, 2021.
54. *Graph mining and multi-relational learning: Tools and applications.* Shobeir Fakhraei and Christos Faloutsos ECML-PKDD, Sept. 19, 2022.
55. *Temporal Graph Mining for Fraud Detection.* Christos Faloutsos, Pedro Fidalgo, and Mirela Cazzolato. ICDM 2023.

GRANTS

1. IBM FULCRUM project grant, round II (1986-1988). 2 IBM PC AT's, fully equipped (≈ $10,000). The project is to implement a full-text retrieval system, using a novel method, called "signature files".
2. NSF Grant (ID: DCR-8616833), 7/87 to 12/89. Title: *"Signature File Methods for Text Data Bases"*. Amount: $102,176.
3. NSF REU (Research Experience for Undergraduates) grant (IRI-8844914), amendment to the previous NSF grant DCR-8616833. Amount: $3,880.
4. Maryland Industrial Partnerships (MIPS) grant, 1/88 to 6/88. Title: *"Data and Document Interchange in Machine Readable Form"* Amount: $30,241.
5. NSF Grant (ID: IRI-8719458), 7/88-7/91 Title: *"High Performance Engineering Information Systems"*. Principal Investigator: N. Roussopoulos. Co-Principal Investigators: T. Sellis, L. Mark, C. Faloutsos. Amount: $391,071.
6. AFOSR Grant (ID: AFOSR-89-0303), 4/89-4/92 Title: *Design Issues for High Performance Engineering Information Systems* Principal Investigator: N. Roussopoulos. Co-Principal Investigators: T. Sellis, L. Mark, C. Faloutsos. Amount: $405,000.
7. NSF REU (Research Experience for Undergraduates) grant (IRI-8943224), second amendment to the NSF grant DCR-8616833. Amount: $3,998.
8. NSF CISE grant (IRI-8944635), third amendment to the NSF grant DCR-8616833. Amount: $12,914. The Department provides $14,947 as matching funds.
9. Department of Commerce (Bureau of Census) Joint Statistical Agreement (JSA 91-9), 2/1/91-2/1/92. Title: *"Spatial Orders for Census and Sampling Applications"*. Amount: $15,000. The Department provides $6,143

as matching funds.

10. EMPRESS Software Inc., donation of software and 1 year maintenance contract, 4/91. Amount: $23,610.
11. Thinking Machines Inc., donation of software and 2 years maintenance contract, 1/92. Amount: $130,000.
12. NSF-ESPRIT grant (IRI-9205273), 6/93-6/96. Title: *"Multimedia Information Retrieval Systems"* Amount: $30,000.
13. Illustra Information Technologies Inc., Engines for Innovation Research Grant, 10/94. Title: *Database Support for Genomic and Medical Applications* Principal Investigators: Michael Franklin and Christos Faloutsos. Amount: Database Server Software, Training and Maintenance (dollar value: to be determined).
14. NSF grant (IRI-9625428), 8/1/96-7/31/99 Title: *"Fast Searching of Multimedia Objects by Content"* Amount: $305,837.
15. IBM-SUR grant, 1996-1997 Title *Studies in Multimedia Data Acquisition, Searching and Representation* PIs: Gary Marchionini and Christos Faloutsos Equipment grant.
16. Maryland Procurement, 9/96-9/99 Title: *Document Image, Video and Natural Language Processing* PI: David Doermann and Amy Weinberger Co-PIs/Senior personnel: Christos Faloutsos and Bonnie Dorr Amount: (est.) $575K
17. NSF IIS, 9813354 6/1/98-11/30/98 Title: *"Workshop On Automated Learning And Discovery"* PIs: Sebastian Thrun, Tom Mitchell, Christos Faloutsos, Larry A. Wasserman. $19,545.
18. NSF KDI, DMS-9873442, 10/15/1998-9/30/2001. Title *"KDI: New Algorithms, Architectures and Science for Data Mining of* Massive Astrophysics Sky Surveys." PIs: Andrew W. Moore, Robert C. Nichol; coPIs: Christos Faloutsos, Peter L. Spirtes, Larry A. Wasserman. $1,600,000.
19. INTEL equipment grant, 1/1999. 3 Pentium machines with monitors. Total list price: $21,675.
20. NEC gift, 12/1998. Title: *"Multi-Dimensional Indexing for Information Warehouse"*. Amount: $10,000.
21. NSF, number IIS-98-17496. Title: *"Informedia-II: Integrated Video Information Extraction and Synthesis for Adaptive Presentation and Summarization from Distributed Libraries"*. 5/1/99-04/30/03 PI: Howard Wactlar; Senior personnel: Michael Christel, Christos Faloutsos, Alex Hauptmann, Takeo Kanade. Amount: $4,000,000.
22. NSF, number IIS-9910606 Title *SGER: Fractals for Spatial and Temporal Databases* PI: Christos Faloutsos. 9/15/1999-8/31/2001 Amount: $100,000.
23. DARPA Title *"CONSTELLATION: A Scalable Metrology to Support Theory and Practice of Anomalous-Event Detection"* 8/1/1999 - 7/31/2002. PI: Roy Maxion, Senior personnel: David Banks, Jeffery Hansen, Christos Faloutsos, Karl Levitt, Tom Mitchell, Daniel Siewiorek. Amount: $1,985,858.
24. NSF, number IIS-9988876. Title: *CNPq: IMiMD-Indexing and Data Mining in Multimedia Databases.* PI: Christos Faloutsos. Starting: 9/15/2000, for 3 years. Amount: $200,000.
25. DARPA, contract number N66001-00-1-8936. Title: *Analysis and Simulation of the Internet Topology and its Fault-Tolerance* PI: Michalis Faloutsos. Starting: 7/2000, for 3 years. Subcontractor: Christos Faloutsos (CMU)
26. NSF, number IIS-0083148 Title: *Collaborative Research: Data Mining Meets I/O Performance Evaluation:* Advanced Statistical Tools for Analyzing Bursty Traffic PIs: Christos Faloutsos, Ngai Hang Chan, Tara Madhyastha. Amount for CMU: $420,000. Starting: 9/1/2001, for 3 years.
27. NSF, number IIS-0113089. Title: *A Knowledge Discovery Framework for Civil Infrastructure Contexts* PI: James H. Garrett. Co-PIs: Christos Faloutsos, Sue McNeil. Starting: 2/1/2001, for 3 years. Amount: $241,263.
28. NLM, Grant number 2 R44 LM06520-02A1 Title: *A Bayesian Textual and Multimedia Information Retrieval Engine* PI: Giovanni Marchisio (Insightful). Duration: 9/30/2001-2/29/2003. Amount: $749,224. (CMU portion: $8,000).
29. NSF IIS-0209107 Title: *Collaborative Research: NetMine: Finding Patterns in Network Data* PIs: Christos Faloutsos (CMU); Michalis Faloutsos (UCR) Duration: 9/1/2002-8/31/2005. Amount: $240,000 (CMU portion: $120,000).

30. NSF, IIS-0205224 Title: *Providing Intuitive Access to Human Motion Databases* PIs: Jessica Hodgins, Amy Bruckman, Christos Faloutsos, Nancy Pollard, Randy Pausch Duration: 9/1/2002-8/31/2004. Amount: $510,000.
31. Intel Corporation, Equipment grant Title: *Sensor Network Data Mining* PI: Christos Faloutsos Date: Feb. 2003. Amount: $52,910.
32. PITA/ICES Title: *Automatic Mining on Sensor Data* PIs: Christos Faloutsos, Phil Gibbons Duration: 2003-2004 Amount: $39,079
33. NSF, BES-0329549. Title: *SENSORS: Placement and operation of an environmental sensor network to facilitate decision making regarding drinking water quality and security* PI: Jeanne VanBriessen Co-PIs: Anastassia Ailamaki, Paul Fischbeck, Christos Faloutsos and Mitchell Small. Duration: 09/01/03-8/31/06. Amount: $958,000.00
34. NSF/INT/EAP 03-18547 Title: *Semantic Integration of Stream Data: A Data Mining-based Approach* PI: Christos Faloutsos, Phil Gibbons, Natassa Ailamaki. Duration: Sept 1, 2003 - Aug 31, 2005. Amount: $15,780
35. NSF ITR 03-31697 (large ITR) *ITR: Next Generation Bio-Molecular Imaging and Information Discovery* PI: B. Manjunath et al (UCSB); Robert Murphy et al. (CMU) (C. Faloutsos: Senior Personell) Amount: $3,869,943 Duration: Oct. 1 2003 - Sept. 30, 2008.
36. NSF ITR (medium ITR) 03-26322 *ITR Collaborative Research: Indexing, Retrieval, and Use of Large Motion Databases* PIs: Christos Faloutsos, Jessica Hodgins, Amy Bruckman, Nancy Pollard, Randy Pausch Duration: 3/15/2004 - 2/28/2006. Amount: $706,000.
37. PITA/ICES Title: *Tools for Mining Large Graphs* PI: Christos Faloutsos Duration: 10/1/2004 - 12/31/2005. Amount: $62,243.
38. HP equipment donation *ProLiant DL585R01 server,* Four 2.8GHz Opteron processors, 32Gb memory, 1.4Tb disk. Amount: $49,908. Date: Jan. 30, 2006.
39. PITA/ICES Title: *Distributed Mining in Co-evolving Streaming Sensor Data* PI; Christos Faloutsos Duration: 9/2005-9/2006 Amount: $64K
40. NSF, IIS-0534205 Title: *CISE/IIS: Finding Patterns and Anomalies in Large Time-Evolving Graphs* PI: Christos Faloutsos Duration: 4/15/2006-3/31/2009 Amount: $337,590.
41. IBM Faculty Award, 2006. PI: Christos Faloutsos. Amount: $30,000.
42. Lawrence Livermore National Laboratory (LLNL), Contract No. B526511. Title: *Prediction on Time-Evolving Complex Networks* Duration: 09/01/06 - 09/30/07 Amount: $156,015
43. Yahoo! Research Alliance gift Title: *Analysis and Mining of the Query and Answer System of Yahoo* Duration: 2006-2007. Amount: $75,000.
44. PITA/ICES Title: *Influence Propagation in Large Blog Graphs* PI: Christos Faloutsos Duration: Sept. 2006 - May 2008. Amount: $52,489.
45. NSF Grant No. CNS-0721736 "Collaborative Research: NeTS-NBD: RIDR: Towards Robust Inter-domain Internet Routing: Measurements, Models, and Deployable Tools" PI: Faloutsos Duration: Aug. 2007 - July 2010. Amount: $245,000.
46. IBM Faculty Award, 2007. PI: Christos Faloutsos. Amount: $30,000.
47. NSF Grant No. IIS-0705359 *III-COR: Collaborative Research: Mining Biomedical and Network Data Using Tensors* PI: Faloutsos (co-PI: Vassileios Megalooikonomou, Temple University) Duration: 09/15/07-08/31/10. Amount: $307,985
48. NSF Grant No. DBI-0640543 *Indexing, Mining and Modeling Spatio-Temporal Patterns of Gene Expressions* Eric Xing (PI) and Christos Faloutsos (co-PI). Duration: 08/15/2007 - 07/31/2010. Amount: $1,331,995.
49. Gift from SPRINT (Dr. Jean Bolot). Starting date: 2007. Amount: $52,000.
50. Lawrence Livermore National Laboratory (LLNL), Contract No. B573265. Title: *Mining Large Time-Evolving Graphs* Duration: 03/01/07 - 09/30/08 Amount: $90,387

51. NSF Grant No. IIS0808661 *III-CXT: Collaborative Research: Interactive and Intelligent Searching of Biological Images by Query and Network Navigation with Learning Capabilities* (co-PIs: Eamonn Keogh, James Baldwin, Paul De Ley, Michalis Faloutsos, Amit K. Roy Chowdhury, UC Riverside; Eyualem B. Abebe, Elizabeth City State Univ.). Duration: 8/1/2008-7/30/2011. CMU Amount $149,399.
52. Lawrence Livermore National Laboratory (LLNL), Contract No. B579447 Title: *Mining Large Time-Evolving Graphs* Duration: 12/02/2008 - 09/30/2009 Amount: $50,000.
53. IBM Faculty Award, 2008 PI: Christos Faloutsos. Amount: $20,000.
54. Lawrence Livermore National Laboratory (LLNL), Contract No. B580840 Title: *Trend and Anomaly Detection in Network Traffic Data* Duration: 2/1/2009-09/30-2009 Amount: $100,000.
55. Google grant, Title: *Discovering Patterns and Detecting Anomalies in Large Graphs* Duration: 2009-2010. Amount: $70,000
56. Fujitsu Laboratories gift, 2009. Amount: $35,000.
57. NRO/SAIC Title *Director's Innovative Initiative* Duration: Aug. 2009 - Jan. 2010. Amount: $95,287
58. IBM Faculty Award, 2009 PI: Christos Faloutsos. Amount: $40,000.
59. Lawrence Livermore National Laboratory (LLNL), Contract No. B588309 *Immunization and Mining of Large Cyber Networks* Duration: 02/22/2010 - 12/31/2010 Amount: $100,000
60. Lawrence Livermore National Laboratory (LLNL), *Link-strength estimation in time-evolving graphs* Amount: $50K Duration: 9/2009 - 9/2010
61. Google gift *Wordly Knowledge* (with William Cohen, Tom Mitchell and Garth Gibson) Amount: $1,000,000 Duration: 2010-2012
62. Google gift (renewed) *Wordly Knowledge* (with William Cohen and Tom Mitchell) Amount: $500,000 Duration: 2012-2013
63. DARPA Contract no.: W911NF-09-2-0053 (ARL: CTA-INARC) *Information Network Academic Research Center: an Integrated Approach towards Information Integration, Modeling, Retrieval and Discovery* Total: $16.75M; CMU Amount: $650,000. Duration: 9/2009 - 8/2013.
64. Gordon and Betty Moore Foundation gift. *eScience via data-intensive computing for astrophysics* (with Garth Gibson and Peter Lee). Total amount: $754,660. Duration: 9/3/2009 - 4/30/2012
65. NSF Grant number 1017415 *III: Small: Influence and Virus Propagation in Large Graphs - Theory and Algorithms* Total: $499,682. Duration: Sept. 2010 - Aug. 2012
66. NSF Grant number 0970179 EAGER: Network Pattern Recognition Project Total: $299,982 PI: Lew Lancaster (UCB) (CMU has sub-contract). Duration: Sept. 2010 - Aug. 2011
67. DARPA contract number HDTRA1-10-1-0120 *Robustness Analysis and Anomaly Detection of Interdependent Physical and Social Networks.* Defense Threat Reduction Agency (DTRA). Total amount: $1,062,000. CMU amount: $240K. PIs: Abdelzaher, Eliassi-Rad, Faloutsos, Han. Duration: October 2010 - October 2013.
68. LLNL contract number B594252 *Mining Large, Time-Evolving Data for Cyber Domains* Total: $85,000. Duration: Jan. 2011 - Sept. 2011
69. DARPA (sub-contract to SAIC) Prime Number: W911NF-11-C-0088 Sub Award Number: P010089633 *Anomaly Detection at Multiple Scales (ADAMS)* CMU part: $482,135 Duration: 08/22/2011 - 05/30/2013.
70. DARPA (sub-contract to Leidos) Prime Number: W911NF-11-C-0088 Sub Award Number: P010089633 *Anomaly Detection at Multiple Scales (ADAMS) Phase II* Duration: 6/17/2013-05/30/2015. CMU part: $556,178.
71. DARPA (subcontract to IBM) *Understand and Utilize Context-Aware Information Dissemination in Social Media* Amount: $46K (CMU part); Duration: 01/01/12 - 12/31/14.
72. NSF IIS-1217559 *CGV: Small: Making Sense out of Large Graphs - Bridging HCI with Data Mining* (with Aniket Kittur). Amount: $500K; Duration: 09/15/2012 - 8/31/2015.
73. NSF IIS-1247489, NIH 1R01GM108339-1: *BIGDATA: Mid-Scale: DA: Collaborative Research: Big Tensor Mining: Theory, Scalable Algorithms and Applications* (with Tom Mitchell; and UMN: Nikos Sidiropoulos, George Karypis). Amount: $894,892 to CMU, ($1.6M total). Duration: Dec. 1, 2012 - Nov. 30, 2016.

74. NSF Award No. CNS-1314632 *TWC: Medium: Collaborative: Know Thy Enemy: Data Mining Meets Networks for Understanding Web-Based Malware Dissemination* Amount: $333,333 to CMU ($1M total). Duration: 9/1/2013 - 8/31/2017.
75. Lawrence Livermore National Laboratory (LLNL), Contract number 30788.1.1990222 *Data Science Initiative University Outreach Project: Quantification and Attribution of Network Changes.* Amount: $30K. Duration: June 2013 - Sept. 2013.
76. Lawrence Livermore National Laboratory (LLNL), *Graph Understanding and Fraud Detection* Amount: $70K Duration: Jan. 2014 - Sept. 2014.
77. NSF Award No. IIS-1408924 *III: Medium: Collaborative Research: Collective Opinion Fraud Detection: Identifying and Integrating Cues from Language, Behavior, and Networks* (Collaborative with Profs. Leman Akoglu (Stonybrook), and Bing Liu (UIC)). Amount: $299,908 to CMU ($1.2M total). Duration: 9/1/2014 - 8/31/2018
78. NSF Award No. IIS-1408924 (REU Supplement) Amount: $8K Duration: 9/1/2014 - 8/31/2018 (same as base award).
79. Yahoo FREP gift. Amount: $10,000. Duration: 9/1/2014-9/1/2015.
80. NSF Award No. DBI-1356505 Amount: $279K *ABI Innovation - Collaborative Research: BCSP: Understanding the design and usage of distributed biological networks* (PI: Ziv Bar-Joseph) Duration: 09/01/2014-08/31/2017
81. PNC Center for Innovation Award, No. PF15003 Amount: $38,380; 2016. Under final negotiations for renewal, at $70,000, for 2017. *Fraud Detection in Financial Data* Duration: Dec. 2015 - Dec. 2016.
82. Boeing Amount: $187,918 *Sensor summarization via matrix/tensor analysis* Duration: Sept. 2015 - Sept. 2016; renewed for 2017.
83. Flipkart. Amount: $25,000. Faculty Research Funding - unrestricted.
84. Portuguese Science and Technology Foundation - AIDA grant. Amount $175,000, 3 years, Sept. 2019 - Aug. 2022.
85. Portuguese Science and Technology Foundation - TAMI grant. 3 years, April 2020 - March 2023.
86. Award Number: 54408278001; Pennsylvania Infrastructure Technology Alliance (PITA); 01/01/2020 - 05/31/2021.
87. Innovu gift. Amount: $25K. March 2020.
88. PNC gift, Amount $200K. *Financial Networks.* 2023.
89. PNC gift, Amount $100K. *Credit Card Fraud Detection.* 2023.
90. DEFENSEWERX:GAZE, SOE004001. Amount $175K (PI: Adam Perer; co-PIs Faloutsos, Ravikumar) Duration: 16 Oct. 2023 - 14 June 2024.
91. NIFA Award No. 2024-67021-43696, Amount: $300,000. *Title: Collaborative Research: CPS: Medium: EbeeVet: An Electronic Bee-Veterinarian Framework to Secure Honey Bees.* Duration: 9/15/2024 - 9/14/2027 (Collaborative with UCR - Profs. Hyoseung Kim, Vassilis Tsotras, Boris Baer - $1M total).

FELLOWSHIPS AND AWARDS

1. Graduate Research Board Summer Research Award 1987: $4,000.
2. 1989 Presidential Young Investigator Award (PYI) - NSF IRI-8958546. Title: *Access methods for large multimedia databases* $125,000 for 5 years; up to $500,00 with matching funds.
3. 1998-2001: Litton Fellow, Computer Science Department, Carnegie Mellon University. Amount: $10,000 per year.
4. 2006: *Research Contribution Award*, in the Int. Conference on Data Mining (ICDM), Hong Kong, China, December 2006.
5. 2010: *Innovations Award*, in ACM SIGKDD, Washington DC, USA, Aug. 2010.
6. 2010: ACM Fellow

7. 2012: Honorary PhD from Aristotle University of Thessaloniki, Greece.
8. 2018: *Distinguished Contribution Award*, in PAKDD, Melbourne, Australia, June 2018.
9. 2019: AI Tang fellowship (CSD, CMU)
10. 2020: Fredkin Professorship in Artificial Intelligence.

BEST PAPER AWARDS

1. Award for *Best paper: Integration with theory*, in ACM SIGMOD 1994. (Christos Faloutsos, M. Ranganathan and Yannis Manolopoulos *Fast Subsequence Matching in Time-Series Databases* Proc. ACM SIGMOD, Minneapolis MN, May 25-27, 1994)
2. **1997 VLDB 10 Year Ago Paper Award** (Timos Sellis, Nick Roussopoulos and Christos Faloutsos *"The R+-Tree: A Dynamic Index for Multi-Dimensional Objects"*, VLDB 1987, pp. 507-518
3. *Best Paper Runner-Up* Award, in KDD 2001 (Zhiqiang Bi, Christos Faloutsos and Flip Korn *The "DGX" Distribution for Mining Massive, Skewed Data* KDD 2001, San Francisco, CA, August 2001).
4. *Best student paper* Award, in Perforance 2002 (Mengzhi Wang, Anastassia (Natassa) Ailamaki and Christos Faloutsos *Capturing the spatio-temporal behavior of real traffic data* IFIP Int. Symp. on Computer Performance Modeling, Measurement and Evaluation, Rome, Italy, Sept. 2002
5. *Best student paper* Award Jia-Yu Pan, Christos Faloutsos, Masafumi Hamamoto and Hiroyuki Kitagawa *AutoSplit: Fast and Scalable Discovery of Hidden Variables in Stream and Multimedia Databases* PAKDD, Sidney, Australia, May 2004.
6. *Best research paper* Award: Jure Leskovec, Jon Kleinberg and Christos Faloutsos *Graphs over Time: Densification Laws, Shrinking Diameters and Possible Explanations* KDD 2005, Chicago, IL, Aug. 2005
7. One of five *'best student paper'* awards: Arnab Bhattacharya, Vebjorn Ljosa, Jia-Yu Pan, Mark Verardo, Hyunjeong Yang, Christos Faloutsos, and Ambuj Singh, *ViVo: Visual Vocabulary Construction for Mining Biomedical Images* Fifth IEEE International Conference on Data Mining, New Orleans, Louisiana, U.S.A., November 27-30, 2005.
8. *Best paper* award: Steven W. Schlosser, Jiri Schindler, Stratos Papadomanolakis, Minglong Shao, Anastassia Ailamaki, Christos Faloutsos, and Gregory R. Ganger *On Multidimensional Data and Modern Disks* FAST 2005.
9. *Best Research paper* award: Hanghang Tong, Christos Faloutsos, and Jia-Yu Pan *Fast Random Walk with Restart and Its Applications* ICDM 2006, Hong Kong.
10. *Best Research Paper* award: Jimeng Sun, Yinglian Xie, Hui Zhang and Christos Faloutsos *Less is More: Compact Matrix Decomposition for Large Sparse Graphs* SDM'07, Minneapolis, MN, USA, April 26-28, 2007.
11. *Best Student Paper Award*: Jure Leskovec, Andreas Krause, Carlos Guestrin, Christos Faloutsos, Jeanne VanBriesen and Natalie Glance, *Cost-effective Outbreak Detection in Networks.* ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (ACM KDD), San Jose, CA, USA, August 2007.
12. *Best Paper Award*: Hanghang Tong, Spiros Papadimitriou, Philip S. Yu and Christos Faloutsos, *Proximity Tracking on Time-Evolving Bipartite Graphs* SDM 2008, Atlanta, GA, USA, April 2008.
13. *Best Research Paper Award*: Krause, A., Leskovec, J., Guestrin, C., VanBriesen, J., Faloutsos, C. (2008) *Efficient Sensor Placement Optimization for Securing Large Water Distribution Networks* ASCE Journal of Water Resources Planning and Management, 134(6): 516-526.
14. *Best Knowledge Discovery Paper award*: Leman Akoglu and Christos Faloutsos, *RTG: A Recursive Realistic Graph Generator using Random Typing* ECML PKDD, Bled, Slovenia, Sept. 2009.
15. *Best Applications paper* (runner up): U Kang, Charalampos Tsourakakis, and Christos Faloutsos, *PEGASUS: A Peta-Scale Graph Mining System - Implementation and Observations* ICDM, Miami Florida, Dec. 2009
16. *Best Paper* award: Leman Akoglu, Mary McGlohon and Christos Faloutsos *Oddball: Spotting Anomalies in Weighted Graphs* PAKDD 2010, Hyderabad, India, 21-24 June 2010.

17. **Test of time** award, in SIGCOMM 2010: Michalis Faloutsos, Petros Faloutsos, and Christos Faloutsos *On Power-Law Relationships of the Internet Topology* (published in SIGCOMM 1999).
18. *Best Application paper* award: U Kang, Brendan Meeder and Christos Faloutsos *Spectral Analysis for Billion-Scale Graphs: Discoveries and Implementation* PAKDD, Shenzhen China, May 24-27, 2011.
19. *Best paper award*: Hanghang Tong, B. Aditya Prakash, Tina Eliassi-Rad, Michalis Faloutsos and Christos Faloutsos *Gelling, and Melting, Large Graphs by Edge Manipulation*, CIKM'12, Maui, Hawaii, USA, Oct. 2012.
20. *Best student paper* award (runner-up): Miguel Araujo, Spiros Papadimitriou, Stephan Guennemann, Christos Faloutsos, Prithwish Basu, Ananthram Swami, Evangelos Papalexakis, and Danai Koutra, *Com2: Fast Automatic Discovery of Temporal ('Comet') Communities* PAKDD'14, Tainan, Taiwan, May 13-16, 2014.
21. **Test of time** award, in ECML/PKDD 2015: Jure Leskovec, Deepayan Chakrabarti, Jon M. Kleinberg, Christos Faloutsos: *Realistic, Mathematically Tractable Graph Generation and Evolution, Using Kronecker Multiplication.* PKDD 2005, p. 133-145, Porto, Portugal, 2005.
22. **ICDM 10-year highest impact** paper award, ICDM 2016: Hanghang Tong, Christos Faloutsos, and Jia-Yu Pan *Fast Random Walk with Restart and Its Applications* in ICDM 2006.
23. **KDD Test of time** award, KDD 2016: for the KDD'05 paper: Jure Leskovec, Jon Kleinberg and Christos Faloutsos *Graphs over Time: Densification Laws, Shrinking Diameters and Possible Explanations*
24. *KDD best research paper award*, 2016: Bryan Hooi, Hyun Ah Song, Alex Beutel, Neil Shah, Kijung Shin, Christos Faloutsos, *FRAUDAR: Bounding Graph Fraud in the Face of Camouflage* KDD, San Francisco, CA, USA, Aug. 2016.
25. *ICDM Best paper award*, 2017 Miguel Araujo, Pedro Ribeiro, and Christos Faloutsos, *TensorCast: Forecasting with Context using Coupled Tensors*
26. *ECML/PKDD best student paper* award (runner-up), 2018: Bryan Hooi, Dhivya Eswaran, Hyun Ah Song, Amritanshu Pandey, Marko Jereminov, Larry Pileggi and Christos Faloutsos, *GridWatch: Sensor Placement and Anomaly Detection in the Electrical Grid.* ECML/PKDD 2018, Dublin, Ireland, Sept. 10-14, 2018.
27. **ICDM 10-Year Highest-Impact** paper award, ICDM 2019 for the 2009 paper: U Kang, Charalampos Tsourakakis, Christos Faloutsos *PEGASUS: A Peta-Scale Graph Mining System*
28. **KDD Test of time** award, KDD 2019, for the KDD 2007 paper: Jure Leskovec, Andreas Krause, Carlos Guestrin, Christos Faloutsos, Jeanne VanBriesen and Natalie Glance, *Cost-effective Outbreak Detection in Networks.*
29. **PAKDD Most Influential Paper** Award, PAKDD 2020, for the PAKDD 2010 paper: Leman Akoglu, Mary McGlohon and Christos Faloutsos *Oddball: Spotting Anomalies in Weighted Graphs* PAKDD 2010, Hyderabad, India, 21-24 June 2010.
30. *Best Poster* Honorable mention award, VIS 2021 Catalina Vajiac, Andreas Olligschlaeger, Yifei Li, Pratheeksha Nair, Meng-Chieh Lee, Namyong Park, Reihaneh Rabbany, Duen Horng Chau, and Christos Faloutsos *TrafficVis: Fighting Human Trafficking Through Visualization* IEEE VIS, October 2021 (virtual).
31. *Best Paper* Honorable mention award, VIS 2022, Catalina Vajiac, Duen Horng Chau, Andreas Olligschlaeger, Rebecca Mackenzie, Pratheeksha Nair, Meng-Chieh Lee, Yifei Li, Namyong Park, Reihaneh Rabbany, and Christos Faloutsos. *TrafficVis: Visualizing Organized Activity and Spatio-Temporal Patterns for Detecting Human Trafficking,* IEEE VIS, Oklahoma City, OK, Oct. 15-21, 2022.
32. Donald G. Fink *Overview Paper* Award, IEEE Signal Processing Society 2023: *Tensor Decomposition for Signal Processing and Machine Learning,* by Nicholas D. Sidiropoulos, Lieven De Lathauwer, Xiao Fu, Kejun Huang, Evangelos E. Papalexakis, Christos Faloutsos, IEEE Transactions on Signal Processing, July 2017.

SOFTWARE AWARDS

1. Third place (silver prize), in the *Open Source Software World Challenge 2010*. PEGASUS graph mining system (www.cs.cmu.edu/~pegasus)

IN THE NEWS

1. Dec. 2005: Interview in the ACM Sigmod Record (Distinguished Database Profiles)
2. Dec. 2006: NetProbe fraud detection algorithm (Wall Street Journal, USA Today, Washington Post, Los Angeles Times, KDKA TV (CBS))
3. Oct. 2012: NSF press release on BIG DATA grants.
4. Fall 2016: 'Fraudar' algorithm for on-line-review fraud detection. (NSF news, NPR/WESA Pittsburgh, Digital Trents)
5. May 2021: 'InfoShield' algorithm for Human Trafficking Detection. (CMU news article, WPXI).
6. Oct. 2022: 'TrafficVis' visualization system for Human Trafficking Detection. (CMU news article).
7. Feb.-March 2025: 'EBeeVet' monitoring system for hives (CMU news, UCR news, MSN and other articles).

COURSES TAUGHT

At UMD:

Spring '86	CMSC 420: Data Structures	required	(40)
Fall '86	CMSC 420: Data Structures	required	(40)
Spring '87	CMSC 828E: File Structures	seminar	(9)
Fall '87	CMSC 424: Database Design (**ITV**)	required	(40)
Spring '88	CMSC 424: Database Design (**ITV**)	required	(33)
Fall '88	CMSC 828F: File Structures	seminar	(12)
Spring '89	CMSC 624: Database Mgmnt. Sys. (**ITV**)	required	(25)
Fall '89	CMSC 112: Computer Science I	required	(110)
Spring '90	CMSC 424: Database Design	required	(21)
Fall '90	CMSC 828F: File Structures	seminar	(10)
Spring '91	CMSC 624 :Database Mgmnt. Sys.	required	(23)
Fall '91	CMSC 828F :File Structures	seminar	(12)
Spring '92	CMSC 424 :Database Design	required	(18)
Fall '93	CMSC 424 :Database Design	required	(50)
Spring '94	CMSC 624 :Database Mgmnt. Sys.	required	(43)
Fall '94	CMSC 424 :Database Design (**ITV**)	required	(42)
Spring '96	CMSC 724 :Database Mgmnt. Sys.	required	(28)
Fall '96	CMSC 424 :Database Design	required	(49)
Spring '97	CMSC 724 :Database Mgmnt. Sys.	required	(30)

At CMU:

Semester	Title	Units	Enrollm.	fac. eval - instr.	fac. eval - course
Fall '97	15-829: Adv. DB Applications	12	(6)	4.17	4.17
Spring '98	15-499C: DB Applications	12	(32)	4.39	4.14
Fall '98	15-829: Adv. DB Applications	12	(5)	5.0	5.0
Spring '99	15-415A: DB Applications	12	(58)	4.37	4.16
Fall '99	15-829: Adv. DB Applications	12	(6)	4.83	4.83
Spring '00	15-415A: DB Applications	12	(79)	4.00	3.82
Fall '00	15-415A: DB Applications	12	(82)	4.05	4.03
Spring '01	15-826/10-603: Multimedia and Data Mining	12	(11)	4.87	4.75
Spring '01	10-603: Multimedia and Data Mining	12	(8)	4.33	4.50
Fall '01	15-415A: DB Applications	12	(77)	4.13	4.00
Spring '02	15-826/10-603: Multimedia and Data Mining	12	(10)	5.00	4.88
Spring '02	10-603: Multimedia and Data Mining	12	(17)	4.73	4.73
Fall '02	15-415A: DB Applications	12	(61)	4.26	4.17

Spring ’03	15-721: DB Sys. and Impl.	12	(20)	4.87	4.87
Fall ’04	15-415: DB Applications	12	(34)	4.3	4.2
Spring ’05	15-826: Multimedia and Data Mining	12	(26)	4.5	3.9
Fall ’05	15-415: DB Applications	12	(25)	4.4	4.3
Spring ’06	15-826: Multimedia and Data Mining	12	(20)	4.9	4.7
Fall ’06	15-415: DB Applications	12	(22)	3.6	3
Spring ’07	15-826: Multimedia and Data Mining	12	(16)	4.5	4.5
Semester	Title	Units	Enrollm.	teach.	course
Fall ’07	15-415: DB Applications	12	(24)	4.57	4.13
Spring ’08	15-826: Multimedia and Data Mining	12	(23)	4.73	4.73
Fall ’08	15-415: DB Applications	12	(21)	4.00	3.85
Spring ’09	15-826: Multimedia and Data Mining	12	(26)	4.67	4.00
Fall ’09	15-415: DB Applications	12	(21)	4.00	3.93
Spring ’10	15-826: Multimedia and Data Mining	12	(22)	4.73	4.64
Fall ’11	15-826: Multimedia and Data Mining	12	(35)	4.65	4.41
Spring ’12	15-415: DB Applications	12	(26)	4.47	4.40
Fall ’12	15-826: Multimedia and Data Mining	12	(49)	4.58	4.47
Spring ’13	15-415/615: DB Applications	12	(73)	4.25/4.87	4/4.86
Fall ’13	15-826: Multimedia and Data Mining	12	(60)	4.85	4.8
Spring ’14	15-415/615: DB Applications	12	(68)	3.67/4.87	3.67/4.9
Fall ’14	15-826: Multimedia and Data Mining	12	(85)	4.78	4.6
Spring ’15	15-415/615: DB Applications	12	(62)	4.22/4.78	4.11/4.74
Fall ’15	15-415/615: DB Applications	12	(80)	4.29/4.78	4.14/4.74
Spring ’16	15-826: Multimedia and Data Mining	12	(60)	4.49	4.12
Fall ’16	15-415/615: DB Applications	12	(˜74)	4.4/4.68	4.2/4.61
Spring ’17	15-826: Multimedia and Data Mining	12	(68)	4.21	4.21
Spring ’19	15-826: Multimedia and Data Mining	12	(20)	4.77	4.77
Fall ’23	15-826: Data Mining Recipes	6	(2)	5.00	5.00
Fall ’24	15-826: Multimedia and Data Mining	12	(6)	5.00	5.00
Fall ’25	15-826: Multimedia and Data Mining	12	(8)	4.80	4.80

TEACHING AWARDS

1. Award for Teaching Excellence (Honorable mention); Dept. of C.S., Univ. of Maryland, 1986-1987.
2. Award for Teaching Excellence; Dept. of C.S., Univ. of Maryland, 1991-1992.
3. Award for Teaching Excellence (Honorable mention); Dept. of C.S., Univ. of Maryland, 1995-1996.
4. Award for Teaching Excellence, Center of Teaching Excellence, Univ. of Maryland, May 1998.

STUDENTS, THESES AND POSTDOCS DIRECTED

Ph.D. Advising

1. Ibrahim Kamel (graduated: Dec. 1994). Thesis title: *High Performance Spatial Indexing for Parallel I/O and Centralized Architectures.*
2. King-Ip (David) Lin (graduated: Dec. 1996). Thesis title: *Indexing Non-Traditional and Multimedia Databases*
3. Philip ("Flip") Korn (graduated: 1998) Title: *Indexing and Data Mining in Multimedia Databases*
4. Byoung-Kee Yi (grad.: May 2000). Title: *Similarity Searching in Time Sequence Databases.*
5. Leejay Wu (grad.: Summer 2005).
6. Deepay Chakrabarti (CALD/MLD - grad.: Summer 2005).

7. Spiros Papadimitriou (grad.: Fall 2005).
8. Jia-Yu Tim Pan (co-advised with H. Wactlar - grad.: April 2006).
9. Jimeng Sun (CSD - grad. 2007) (*SIGKDD Doctoral Dissertation Award*, Runner-up, 2008).
10. Jure Leskovec (MLD - grad.: Sept. 2008). (*SIGKDD Doctoral Dissertation Award*, 2009).
11. Hanghang Tong (MLD - grad: Dec. 2009).
12. Mary McGlohon (MLD - grad.: Sept. 2010). Co-advisor: Alan Montgomery (CMU-Tepper).
13. Lei Li (CSD) - thesis proposal: 2009; graduated: Sept. 12, 2011. (*SIGKDD Doctoral Dissertation Award*, Runner-up, 2012).
14. Fan Guo (CSD) - thesis proposal: May 2010; defense Sept. 19, 2011.
15. Leman Akoglu (CSD) - thesis proposal: March 2011; defense Aug. 22, 2012.
16. Polo Chau (MLD) - thesis proposal: March 2011; defense July 30, 2012. (*CMU SCS dissertation award* runner-up, 2012).
17. U Kang (CSD) - thesis proposal: Fall 2011, defense May 2012. (*SIGKDD Doctoral Dissertation Award*, Honorable Mention, 2013).
18. B. Aditya Prakash (CSD) - thesis proposal: March 2011, defense: Sept. 18 2012.
19. Danai Koutra (CSD) - defense: June 2015 (*SIGKDD Doctoral Dissertation award, 2016*; CMU/SCS doctoral dissertation award (honorable mention); nominated for ACM doctoral dissertation award).
20. Evangelos ('Vagelis') Papalexakis (CSD - defense: May 2016). (*SIGKDD Doctoral Dissertation award - runner up*).
21. Alex Beutel (CSD, defense: May 2016). (*SIGKDD Doctoral Dissertation award - runner up*). Co-advised with Alex Smola.
22. Miguel Araujo (CSD - Portugal program - defense: May 2017). Co-advised with Prof. Pedro Ribeiro.
23. Neil Shah (CSD - defense: Oct.17, 2017).
24. Hyun Ah Song (MLD, defense April 2020).
25. Kijung Shin (CSD - defense February 2019).
26. Dhivya Eswaran (CSD, defense April 2020).
27. Namyong Park (CSD, defense 4/1/2022).
28. Minji Yoon (CSD, defense Feb. 2024) - co-advised with Russ Salakhutdinov.
29. Catalina Vajiac (CSD, defense April 2026).
30. Meng-Chieh (Jeremy) Lee (CSD, defense May 15, 2025) - co-advised with Leman Akoglu.
31. Saranya Vijayakumar (CSD, started 2021, th.prop. Oct. 2025) - co-advised with Matt Fredrikson.
32. Karish Grover (MLD, started 2023) - co-advised with Geoff Gordon.
33. Kanakis (Akis) Kelaidis (CSD, started Jan. 2026).

Ph.D. Co-Advising

1. Douglas Oard (grad.: July 96) Advisor: Nick DeClaris (UMCP-EE) Thesis title: *Information Retrieval and Filtering*.
2. Alberto Belussi (grad.: 1996) Advisor: Giuseppe Pelagatti (Polytecnico di Milano, Italy) Thesis title: *Analysis of Spatial Queries Using Fractals*.
3. Erik Riedel (grad.: Oct. 1999) Co-advisor: David Nagle (CMU-ECE) Thesis title: *Active Disks - Remote Execution for Network-Attached Storage.*
4. Robson Leonardo Ferreira Cordeiro (grad.: 2011). Title: *Data mining in large sets of complex data*. Dept. of Computer Science, University of Sao Paulo at Sao Carlos, Brazil. Co-advisor: Prof. Caetano Traina (USP) Winner of '*best CS Dissertation Award*' in Brazil.

5. Alceu Ferraz Costa (grad.: May 2017) Dept. of Computer Science, University of Sao Paulo at Sao Carlos, Brazil. Co-advisor: Prof. Agma Traina (USP)
6. Bryan Hooi (Stat/MLD; defense April 2019). Co-advisor: David Choi
7. Hemank Lamba (ISR; defense Nov. 2019). Co-advisor: Juergen Pfeffer.
8. Jielin Qiu (CSD, th.prop Nov. 2023, defense April 2024). Co-advisor: Lei Li (CMU/LTI).

Postdoc advising

1. Dr. Stephan Guennemman, 2012-2014
2. Dr. Bruno Ribeiro, 2013-2015

M.Sc. Advising or DAP project - CALD/MLD

1. Zhiqiang Bi (grad.: May 2002)
2. Deepay Chakrabarti (grad.: May 2002)
3. Elena Eneva (grad.: May 2002)
4. Krishna Kumar (grad.: July 2003)
5. Yiping Zhan (grad.: June 2003)
6. Edoardo Airoldi (grad.: Aug. 2003)
7. Ping Chen (grad.: May 2006)
8. Guangyu Xia (DAP, April 2013)

M.Sc. Advising - capstone project

1. Ms. Yuanchi Ning (Dec. ’14)
2. Mr. Tianmin Zou (Dec. ’14)
3. Elizabeth Hong (Dec. ’14)
4. Di Jin (May ’16)
5. Soumya Wadhwa (exp. ’17)
6. Mr. Tejas Nama (exp. ’17)
7. Mr. Saksham Singhal (exp. ’17)

M.Sc. Advising (thesis)

1. Raphael Chan (Spring 1988). Title: *Text Access Methods for Optical and Large Magnetic Disks*.
2. Edward Lewis (Spring 1989). Title: *Animated Images for a Multimedia Database*.
3. Barry James (Spring 1992). Title: *Fast String Matching Algorithms*.
4. Zhiqiang Bi (Spring 2002). M.Sc. in CALD. Title: *DGX: Modeling Skewed Distributions*.
5. Deepay Chakrabarti (Spring 2002). M.Sc. in CALD. Title: *Nonlinear forecasting*.
6. Da-Cheng Juan. M.Sc. in MLD (Fall 2013) Title: *Beyond Poisson: Modeling interarrival times of requests in a data center*.
7. Yang Weng. M.Sc. in MLD (Spring 2014) *Robust Data-Driven State Estimation for Smart Grid*.

M.S. Advising (scholarly paper)

1. Hatem Slim (Sleem) (Spring 1987). Title: *Multiattribute Hashing and Disk Allocation Methods.*
2. Dimitrios Metaxas (Spring 1988). Title: *Disk Allocation for Cartesian Product Files on Multiple-Disk Systems.*
3. Shari Roseman (Spring 1989). Title: *Fractals for Secondary Key Retrieval.*

4. Sze-Nam Hong (Spring 1990). Title: *Implementation of the Grid File Method.*
5. Georgios Panagopoulos (Spring 1992). Title: *Bit Sliced Signature Files for Very Large Databases on a Parallel Machine Architecture*
6. Michael Otterman (Spring 1992). Title: *Approximate Matching with High Dimensionality R-trees*
7. Sunil Paliwal (Spring 1992). Title: *Declustering using Q-nary Error Correcting Codes*
8. Pravin Bhagwat (Spring 1992). Title: *Declustering Using Fractals*
9. Robert A. Best (Summer 1992). Title: *Implementation of a High Dimensionality Indexing Method.*
10. Philip Quartararo (Fall 1993). Title: *Study of Hilbert Curves.*
11. Xuejun Tang (Spring 1994). Title: *A Report on Implementing Persistent R-trees.*
12. Wen Wang (Fall 1994). Title: *Implementation of Support Routines for the Deferred-Split R-tree.*
13. Yik Chuan Tan (Fall 1994). Title: *Nearest Neighbor Search in Deferred-Split R-trees*
14. James Aspinwall (Spring 1997). M.Sc. in Systems Engineering (ISR). Title: *SPRINT: An algorithm to obtain approximate values for n-gram similarity scoring*
15. Khaled Arisha (Summer 1997). Title: *X-TERPSI: An Image Indexing System Using Histograms, Wavelets and Shapes*

Undergraduate Honor's program advising

1. Frank Andrasco (Fall 1991)
2. Hussain Karim (Fall 1991)
3. Xuehong (Cheryl) Yu (Spring 1997)

Undergraduate 386/498 classes

Chia-Lun (Karen) Kuo; Hou-Yu (Alex) Su; Xuehong (Cheryl) Yu; Min-Jie Yu (Spring 1997)

Ph.D. committees

1. Hyunchul Kang (res. proposal; final defense Fall 1987). Advisor: N. Roussopoulos.
2. Zheng Lin (res. proposal; final defense). Advisor: J. Minker.
3. Li Tong (res. proposal). Advisor: N. Roussopoulos.
4. Sergio Cardenas (res. proposal). Advisor: M. Zelkowitz.
5. Paul Vongsathorn (res. proposal). Advisor: S. Carson.
6. Jianhui Tian (res. proposal). Advisor: M. Zelkowitz.
7. Thomas Chiungtung Kao (res. proposal; final defense). Advisor: D. Mount.
8. Gary Benson (res. proposal). Advisor: A. Amir.
9. Brian Johnson (res. proposal). Advisor: B. Shneiderman.
10. Sanjeev Setia (res. proposal). Advisor: S. Tripathi.
11. Alan Saalfeld (res. proposal). Advisor: H. Samet.
12. Roberta J. Cochrane (final defense). Advisor: L. Mark.
13. Gary E. Benson (final defense). Advisor: A. Amir.
14. Raymond Ng (final defense). Advisor: V.S. Subramanian.
15. Helene Young-Myers (final defense, School of Management). Advisor: L. Raschid
16. Sarit Mukherjee (res. proposal, final defense). Advisor: S. Tripathi.
17. Kyuseok Shim (res. proposal, final defense). Advisor: T. Sellis.
18. Sedat Akyurek (res. proposal; final defense). Advisor: K. Salem.

19. Alex Delis (res. proposal; final defense). Advisor: N. Roussopoulos.
20. Sunil Arya (final defense). Advisor: D. Mount.
21. Ya-hui Chang (res. proposal). Advisors: L. Raschid and B. Dorr.
22. Chung-Min Chen (res. proposal and final defense). Advisor: N. Roussopoulos.
23. Debanjan Saha (res. proposal). Advisor: S. Tripathi
24. Pravin Bhagwat (res. proposal). Advisor: S. Tripathi
25. Yinong Chen (res. proposal in 94; final defense in 97). Advisor: J. Reggia.
26. Bongki Moon (res. proposal and final defense). Advisor: Joel Salz
27. Tung-Duong Tran-Luu (defense). Advisor: Nicholas DeClaris (EE)
28. Kasim Selcuk Candan (res. proposal in 96, defense in 97). Advisor: V.S. Subramanian.
29. Suleyman Cenk Sahinalp (defence). Advisor: Uzi Vishkin (EE).
30. Tamara Gibson Kolda (defense). Advisor: Dianne O'Leary
31. Fan-Tao Pu (res. proposal) Advisor: David Mount.
32. Konstantinos Stathatos (res. proposal, defense). Advisor: Nick Roussopoulos.
33. Eenjun Hwang (res. proposal, defense). Advisor: V.S. Subramanian
34. Vikrant Kobla (res. proposal). Advisor: A. Rosenfeld and D. Doermann
35. David Leslie Montgomery (res. proposal) Advisor: J. Reggia
36. Erik Riedel (res. proposal) Advisor: G. Gibson
37. Chen Lee (res. proposal, final defense) Advisor: D. Siewiorek.
38. Scott Davies (res. proposal, final defense) Advisor: A. Moore
39. Robert T. Olszewski (res. proposal, final defense) Advisor: R. Maxion
40. Rebecca Bari Buchheit (res. proposal, final defense, Civ. Eng.) Advisor: J. Garrett
41. Dushyanth Narayanan (res. prop., final defense) Advisor: M. Satyanarayanan.
42. Philip Lee (ADA presentation, Stat/CMU) Advisor: Ngai-Hang Chan.
43. Nabeel Koshak (res. proposal, final defense, Arch./CMU) Advisor: Ulrich Flemming.
44. Sanjay Rao (res. prop., defense) Advisor: Hui Zhang
45. Meel Velliste (res. prop., defense) Advisor: Bob Murphy (Biology/CMU)
46. Orna Raz (res. prop.; final defense) Advisor: Mary Shaw
47. Jun Gao (res. prop.; final defense) Advisor: Peter Steenkiste
48. Wing Ho (Howard) Leung (res. prop.; final defense) Advisor: Tsuhan Chen (ECE)
49. Kai Huang (res. prop.). Advisor: Robert Murphy (Biology)
50. Mengzhi Wang (res. prop., defense '05). Advisor: Natassa Ailamaki
51. Daniel Blandford (res. prop., defense). Advisor: Guy Blelloch
52. Brad Malin (res. prop.; defense March '06). Advisor: Latanya Sweeney
53. Francisco Pereira (res. prop.). Advisor: Tom Mitchell
54. Rong Yan (res. prop. 6/2005, def. 10/2006). Advisor: Alex Hauptmann
55. Paul Ogilvie (res. prop. 6/05, def.: 6/18/2010). Advisor: Jamie Callan
56. Stratos Papadomanolakis (res. prop. 6/05; def.: 5/07). Advisor: Natassa Ailamaki.
57. Xiang Chen (def.: 8/26/05 - Murphy).
58. Xifeng Yan (res. prop. Oct. 2005, defense: July 2006). UIUC - Advisor: Jiawei Han.
59. Mohamed Sharaf (res. prop. Nov. 2005; def.: June 22, 2007). U. Pitt - Advisor: Panos Chrysanthis.

60. Michael Mesnier (res. prop. Nov. 2005, def. Nov. 2007). CMU/ECE - Advisor: Greg Ganger.
61. David McWherter (res. prop.: April 2006, def. Aug 2008)) CMU - Advisor: Mor Harchol-Balter.
62. John Strunk (res. prop.: Aug. 2006; def. April 2008) CMU/ECE - Advisor: Greg Ganger.
63. Yanjun Qi (res. prop.: Sept. 2006) CMU - Advisor: Ziv Bar-Joseph.
64. Kaustav Das (res. prop.: April 3, 2007, def.: March 2009) CMU - Advisor: Jeff Schneider.
65. Jie Lu (thesis: April 5, 2007) CMU - Advisor: Jamie Callan.
66. Einat Minkov (res. prop.: June 18, 2007, defense: Nov. 2008) CMU/LTI - Advisor: William Cohen.
67. Jun Yang (res. prop.: Nov. 20, 2007; def.: Dec. 2008) CMU - Advisor: Alex Hauptmann.
68. Qinglan Li (res. prop.: 3/31/2008; def. 6/19/2013) U. Pitt - Advisors: Chrysanthis and Labrinidis
69. Sandeep Pandey (defense: 4/4/2008) - CMU (Adv.: Olston)
70. Dash Debabrata (res. prop. 6/5/2008, def. 11/15/2010) - CMU (Adv.: Ailamaki)
71. Ajit P. Singh (res. prop. 6/16/2008, def.: 9/30/2009) - CMU (Adv.: Geoff Gordon)
72. Ippokratis Pandis (res. prop. Dec. 2008; thesis 5/12/2011) - CMU/EPFL (Adv.: Ailamaki)
73. Mayank Lahiri (res. prop. 3/12/2009, thesis 4/15/2011) - UIC (Adv.: Tanya Berger-Wolf).
74. Nachiketa Sahoo (res. prop. 3/19/2009, thesis 9/4/2009) - CMU-Heinz (Adv.: Ramayya Krishnan).
75. Zhen Guo (res. prop. 4/16/2009; def. 4/12/2010) - SUNY Binghampton (Adv.: Zhongfei Zhang).
76. George Davis (res. prop. 9/14/2009, thesis 10/2011) - CMU/COS (Adv.: Kathleen Carley).
77. Grace Hui Yang (res. prop. 10/9/2009) - CMU/LTI (Adv.: Jamie Callan).
78. Kevin Killourhy (res. prop. 12/14/2009) - CMU/CSD (Adv.: Roy Maxion)
79. Andy Schlaikjer (res. prop. 3/5/2010) - CMU/LTI (Adv. Eric Nyberg).
80. Bin Zhang (res. paper 5/10/2010) - CMU/Heinz (Adv. David Krackhardt)
81. Swapnil V. Patil (res. proposal, 5/10/2010; def. 4/30/2013) - CMU/CSD (Adv. Garth Gibson)
82. Skyler Speakman (first paper presentation 5/11/2010, th. prop.: 3/6/2014, def. 9/24/2014) - CMU/Heinz (Adv. Daniel Neill)
83. Frank Lin (res. proposal, 10/2010, def. 7/2012) - CMU/LTI (Adv. William Cohen)
84. Anagha Kulkarni (res. proposal 7/2011, def.: 4/2013) - CMU/LTI (Adv. Jamie Callan)
85. Robson Leonardo Ferreira Cordeiro (def. 9/2011) - Univ. Sao Paulo, Sao Carlos, Brazil.
86. Raja Sambasivan (res. proposal 10/2011) - CMU/ECE (Adv. Greg Ganger)
87. Gunhee Kim (res. proposal 11/2011, def. 8/30/2013) - CMU/CS (Adv. Takeo Kanade and Eric Xing).
88. Sriram Somanchi (first paper pres.: 2/15/2012; res. proposal: 7/20/2015; def. 12/3/2015) - CMU/Heinz (Adv. Daniel Neill).
89. Petko Bogdanov (res. proposal 3/2012, def. 7/2012) - UCSB (Adv. Ambuj Singh).
90. Soila Pertet-Kavulya (res. proposal 3/2012, def. 5/1/2013) - CMU/ECE (Adv. Priya Narasimhan).
91. Dong Ryeol Lee (def. 5/3/2012) - Georgia Tech (Adv. Alex Gray).
92. Brendan Meeder (res. proposal 6/12/2012; def. 12/3/2014) - CMU/CS (Adv. Luis von Ahn and Manuel Blum).
93. Dafna Shahaf (def. 8/30/2012) - CMU/CS (Adv. Carlos Guestrin and Manuel Blum).
94. Thao Pham (res. prop. 10/12/2012; def. 4/8/2016) - UPitt/CS (Adv. Panos Chrysanthis and Alex Labrinidis).
95. Qirong Ho (res. prop. 1/29/2013, def. 5/2014) - CMU/MLD (Adv. Eric Xing).
96. Guang Xiang (def. 1/30/2013) - CMU/LTI (Adv. Jason Hong)
97. Julian Shun (res. prop. 4/29/2013, def. 4/27/2015) - CMU/CS (Adv. Guy Blelloch)
98. Da-Cheng Juan (res. prop. 5/3/2013, def. 5/30/2014) - CMU/ECE (Adv. Diana Marculescu).
99. Elie Krevat (res. prop. 8/23/2013) - CMU/CSD (Adv. Greg Ganger)

100. Christos Giatsidis (def. 12/4/2013) - Ecole Polytechnique, Paris, France (Adv. Michalis Vazirgiannis)
101. Xia (Ben) Hu (th. prop. 5/8/2014, def. 4/20/2015) - Arizona State University (Adv. Huan Liu)
102. Xuezhi Wang (th. prop. 11/7/2014, def. 6/6/2016) - CMU/CSD (Adv. Jeff Schneider)
103. Huan-Kai Peng (th. prop. 12/15/2015, def. 1/28/2016) - CMU/ECE (Adv. Radu Marculescu).
104. Matt Gardner (th. prop. 2/13/2015, def. 10/21/2015) - CMU/LTI (Adv. Tom Mitchell).
105. Ke Zhang (th. prop. 4/29/2015, def.: 10/21/2016) - UPitt (Adv. K. Pelechrinis).
106. Zitao Liu (th. prop. 5/4/2015, def.: 6/2/2016) - UPitt (Adv. Milos Hauskrecht).
107. Fragkiskos Malliaros (defense 9/16/2015) - Ecole Polytechnique, Paris, France (Adv. Michalis Vazirgiannis).
108. Arda Antikacioglu (th. prop. 04/19/2016, def.: 4/20/2017) - CMU/ACO (Adv. R. Ravi).
109. Nan Du (def. 04/26/2016) - Georgia Tech (Adv. Le Song).
110. William Wang (defense 4/21/2016) - CMU/LTI (Adv. William Cohen).
111. Fatemeh Riahi (defense 12/6/2016) - Simon Fraser Univ. (Adv. Oliver Schulte).
112. Srijan Kumar (defense 4/12/2017) - UMD (Adv. VS Subrahmanian).
113. Xidao Wen (th. prop. 05/31/2017; defense 10/14/2019) - UPitt (Adv. Yu-Ru Lin)
114. Jundong Li (th. prop. 3/2019; defense 6/24/2019) - ASU (Adv. Huan Liu)
115. Ekta Gujral (th. prop. 2/2020; defense 6/4/2021) - UCR (Adv. Vagelis Papalexakis)
116. Fan Yang (th. prop. 4/2020; def. 3/18/2022) - UPitt (Adv. Vladimir Zadorozhny)
117. Faisal Almutairi (defense 7/28/2021) - UMN (Adv. Nikos Sidiropoulos)
118. Nicholas Monath (defense 9/9/2021) - UMass (Adv. Andrew McCallum)
119. Varun Embar (defense 11/05/2021) - UCSC (Adv. Lise Getoor)
120. Lingxiao Zhao (2nd paper, 12/2021) - CMU/Heinz (Adv. Leman Akoglu)
121. Steven Jecmen (th. prop. 4/2022, defense 1/2024) - CMU/CSD (Adv. Nihar Shah, Fei Fang)
122. Rui Wang (th. prop. 5/2022 - defense 5/2023) - UCSD (Adv. Rose Yu)
123. Dongxu Zhang (th. prop. 7/2022; defense 2/2023) - UMass (Adv. Andrew McCallum)
124. Shichang Zhang (th. prop. 11/2022, defense 5/2024) - UCLA (Adv. Yizhou Sun)
125. Shubhranshu Shekhar (th. prop. 2/2023, defense 5/2023) - CMU/Heinz (Adv. Leman Akoglu)
126. Alex Gaudio (defense 7/2023) - CMU-Portugal (Adv. Asim Smailagic)
127. Jing Zhu (th.prop. 3/2025, defense 11/2025) - U. Michigan (Adv. Danai Koutra)
128. Mst. Shamima Hossain (th. prop. 1/2026, defense 9/2026) - UCR (Adv. Vassilis Tsotras and Hyoseung Kim).

M.S. committees

1. Maria Salazar (1986). Advisor: N. Roussopoulos.
2. Hyun Soon Kim (1987). Advisor: N. Roussopoulos.
3. Nicolas Economou (1988). Advisor: N. Roussopoulos.
4. Antony Stamenas (1989). Advisor: N. Roussopoulos.
5. Kannan Ramaswamy (1989). Advisor: N. Roussopoulos.
6. Pankaj Karnik (1989). Advisor: N. Roussopoulos.
7. Young Gyu Kang (1989). Advisor: N. Roussopoulos.
8. Joanne Pelkey (1990). Advisor: N. Roussopoulos.
9. Matthew Lydic (11/19/90). Advisor: T. Sellis.
10. Rodrigo Botafogo (11/19/90). Advisor: B. Shneiderman.
11. Maya Ramamurthy (4/23/91). Advisor: L. Mark.

12. William Joachim Weiland (4/24/91). Advisor: B. Shneiderman.
13. Charles J. Daniels IV (4/29/91). Advisor: A. Mahanti.
14. Dong He (4/24/92). Advisor: R. Furuta.
15. Misako Kamimura (6/15/93). Advisor: T. Sellis.
16. Vinit Jain (9/7/93). Advisor: B. Shneiderman.
17. Jack S. Hsu (4/22/97). Advisor: N. Roussopoulos.
18. Yu Zhong (5/15/00). Advisor: Michael Christel.
19. Yang Wang (8/2003). Advisor: Chenxi Wang (CMU/ECE).
20. Xinghao Pan (5/2009). Advisor: Priya Narasimhan (CMU/ECE).
21. Yibin Lin (8/2013). Advisor: Roni Rosenfeld (CMU/LTI).
22. Venkata Krishna Pillutla (12/14/2015). Advisor: Nina Balcan (CMU/CSD).

PROFESSIONAL SERVICE

NAT. ACADEMY OF SCIENCE COMMITTEE

1. Committee Member, Workshop on Geospatial Information and Information Technology (CSTB-L-00-03-A) Sub-Unit: CSTB (Computer Science and Telecommunications Board), National Academy of Sciences, July 2001 - Jan. 2002.

EDITORSHIPS AND ADVISORY BOARDS

1. Member of the Editorial Board of *IEEE Multimedia*, Nov. 1995 - Dec. 1998.
2. Member of the Advisory Board of *GeoInformatica* (by Kluwer Academic Publishers), Jan. 1996 - Oct. 2010.
3. Member of the Advisory Board of *Information Systems* (by Elsevier Science), May 1996.
4. Member of the Editoral Board of *Information Retrieval Journal* (Kluwer), February 1998-Dec. 2005.
5. Member of the Executive Committee of *ACM SIG-KDD*, 1999-2005.
6. Member of the Editorial Board of the book series on *Data Centric Systems and Applications (DCSA)*, Springer-Verlag, 2002 - 2014.
7. Member of the Scientific Advisory Board of the Helsinki Institute for Information Technology (HIIT)
8. Associate Editor-in-Chief, IEEE TKDE, 2005 - 2007.
9. Member of the Editorial Board of *ACM Trans. on Knowledge Discovery from Data*, 2005 - 2007.
10. Member of the Advisory Board, Lehigh University, CS Department, 2006-2009.
11. Member of the Advisory Board, Kyungwon University, S. Korea, 2011.
12. SDM Steering Committee member, 2013.
13. Member of the IIT Advisory Board, National Center for Scientific Research Demokritos, Agia Paraskevi, Attica, Greece. 2019-2020.
14. Member of the Advisory Board, Department of Informatics, Aristotle University of Thessaloniki, Greece. Since 2021.
15. Member of the director evaluation committee, Information Management Systems Institute, Athena Research Center, Athens, Greece; March 2026.

AWARD COMMITTEES

1. Best Paper Award chair, *KDD*, Las Vegas, Aug. 2008.
2. Member of the *ICDM 2008 awards* committee
3. Member of the *KDD Best Paper Awards* committee (2009, 2012, 2019).
4. Member of the *KDD Dissertation award* committee (2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2021).
5. Member of the *KDD Innovation award* committee (2011-2014,2016-2019, 2021, 2022, 2023).
6. Member of the *SDM 2013 Best Paper Award* committee, Austin TX, May 2-4, 2013.
7. Member of the *ICDE Influential Paper Award* committee (2010,2011,2012,2013,2014).
8. Member of the *KDD Test of Time Award* committee (2014,2015,2026).
9. Member of the ACM *Paris Kanellakis Theory and Practice Award* Committee, 2013.
10. Deputy Chair of the ACM *Paris Kanellakis Theory and Practice Award* Committee, 2014.

11. Chair of the ACM *Paris Kanellakis Theory and Practice Award* Committee, 2015.
12. Member of the ACM *Paris Kanellakis Theory and Practice Award* Committee, 2016.
13. Member of the ICDM 2020 awards committee.
14. Member of the *Test of Time* award committee, The Web Conference 2022.
15. Member of the *ICDM Tao Li* award committee, 2025.
16. Member of the IEEE BigData Inaugural Outstanding Service Award Committee, 2026

CONFERENCE ORGANIZATION

1. Demonstrations Chair, *ACM SIGMOD Conference*, June 3-6, 1996, Montreal, Canada.
2. Vice Chair for the sub-committee on 'Multimedia Systems and Applications', *13th International Conference on Data Engineering (ICDE-97)*, Birmingham, U.K., April 7-11, 1997.
3. Program Committee Chair for the *ACM-SIGMOD* conference, Philadelphia, PA, 1999.
4. Program Committee co-Chair for the *ACM-SIGKDD* conference, Washington DC, 2003.
5. Tutorials co-chair, *VLDB*, Seoul, Korea, Sept. 12-15, 2006.
6. General co-Chair, ASONAM, Aug. 26-29, 2013.

PROGRAM COMMITTEE MEMBER

1. *IEEE Office Automation Symposium*, April 1987.
2. *ACM-SIGMOD conference on Management of Data*, Chicago, June 1-3 1988.
3. *Symposium on the Design and Implementation of Large Spatial Databases*, Santa Barbara, CA, July 17-19, 1989.
4. *COIS90 Conference on Office Information Systems*, Cambridge MA, April 25-27, 1990.
5. *ACM-SIGMOD conference on Management of Data*, Atlantic City, NJ, May 1990.
6. *International Conf. on Multimedia Information Systems*, Jan. 16-18, 1991.
7. *Tenth ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS)*, Boulder Colorado, May 29-31, 1991.
8. *Second Symposium on Large Spatial Databases*, Zurich, Switzerland, Aug. 28-30, 1991.
9. *1992 Workshop on Multimedia Information Systems*, Phoenix, Arizona, February 7-8, 1992.
10. *1992 Conference on Very Large Data Bases (VLDB)*, Vancouver, British Columbia, August 1992.
11. *Second International Conference on Parallel and Distributed Information Systems*, San Diego, California, January 20-22, 1993.
12. *ACM SIGMOD Conf.*, Minneapolis, MN, May 24-27, 1994.
13. *1994 Conference on Very Large Data Bases (VLDB)* Santiago, Chile, Sept. 12-15, 1994.
14. *Fourteenth ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS)*, San Jose, CA, May 22-24, 1995.
15. *The Second International Workshop on Next Generation Information Technologies and Systems (NGITS 95)*, Naharia, Israel, June 27-29, 1995.
16. *Fourth Int. Conference on Information and Knowledge Management (CIKM '95)*, Baltimore, MD, Nov. 29 - Dec. 2, 1995.
17. *12th International Conference on Data Engineering (ICDE 1996)*, New Orleans, LA, Feb. 26-March 1, 1996.
18. *Sixth International Conference on Database Theory (ICDT '97)*, Delphi, Greece, 1997.
19. *Fifteenth ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS)*, Montreal, Canada, May 1996.
20. *First IFCIS Int. Conf. on Cooperative Information Systems (CoopIS'96)*, Brussels, Belgium, June 19-21, 1996.
21. *Parallel and Distributed Information Systems (PDIS) Conference*, 1996.
22. *Fourth ACM Workshop on Advances in Geographic Information Systems (GIS)*, Rockville, MD, November 16-17 1996.
23. *ACM SIGMOD Conf.*, Tucson AZ, May 13-15 1997.
24. *2nd International CONTESSA Database Workshop* on *Constraint Databases and their applications* (CDB'96), London, UK, December 16-17, 1996.
25. *5th International Symposium on Large Spatial Databases, (SSD'97)* Berlin, Germany, July 15-18 1997.
26. *1997 Conference on Very Large Data Bases (VLDB)*, Athens, Greece, August 1997.
27. *XVII International Conference of the Chilean CS Society (SCCC)*, Valparaiso, Chile, 12-14 November 1997.

28. *2nd International Conference on Visual Information Systems (VISUAL'97)* San Diego, CA, 15-17 December 1997.
29. *9th IEEE Int. Conf. on Tools with Artificial Intelligence (ICTAI'97)* Newport Beach, CA, Nov. 4-7, 1997
30. *ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems (PODS)*, Seattle, WA, 1998.
31. *EDBT 98* Valencia, Spain, March 1998.
32. Best Paper Award Committee Member, SIGMOD 1998 Seattle, WA, June 1998.
33. 9th Annual Conf. on Combinatorial Pattern Matching, Rutgers University, NJ, July 13-15, 1998.
34. Fourth Int. Conf. on Knowledge Discovery and Data Mining (KDD98) New York City, Aug. 27-31, 1998
35. International Conference on Data Engineering (ICDE'2000) San Diego, CA. Feb. 2000.
36. Member of the Scientific Committee, 7th Hellenic Conference on Informatics, August 1999, University of Ioannina, Greece
37. Tenth International Conference on Management of Data (COMAD 2000), Pune, India, December 2000.
38. Sixth Int. Conf. on Knowledge Discovery and Data Mining (KDD2000) Boston, MA.
39. Multimedia Information Systems (MIS'00) workshop Chicago, Oct. 2000.
40. Int. Conf. on Knowledge Discovery and Data Mining (KDD2001)
41. ACM SIGMOD 2001, Santa Barbara, CA, May 21-24, 2001.
42. 8th Panhellenic Conference on Informatics, Nicosia, Cyprus, Nov. 2001.
43. VLDB 2002, Hong Kong, China, Aug. 2002
44. SIGKDD 2002, July 23-26, Edmonton Alberta, Canada.
45. Best paper award committee, SIGMOD 2003 (San Diego, CA)
46. 9th Panhellenic Conference on Informatics, (PCI 2003), Thessaloniki, Greece, Nov. 21-23, 2003.
47. PAKDD 2004, Sydney, Australia, May 26-28, 2004.
48. SSDM (16th Int. Conf on Scientific and Statistical Database Management), Santorini, Greece, June 21-23, 2004.
49. KDD 2004, Seattle WA, Aug. 22-25, 2004.
50. PODS 2004, Paris, France.
51. VLDB 2005, Trodheim, Norway
52. KDD 2005, Chicago, IL
53. ICDE 2006, Atlanta, GA
54. SIGMOD 2006
55. KDD 2006 (Senior PC member)
56. HDMS 2006, Greece.
57. SIGMOD 2007, Beijing, China
58. KDD 2007, San Jose, CA, USA
59. SSDBM 2007, Banff, Alberta, Canada, July 2007
60. VLDB 2008, Auckland, New Zealand, August 25-28, 2008.
61. WWW 2008, Beijing, China, April 21-25, 2008.
62. PKDD 2008, Antwerp, Belgium, Sept. 15-19, 2008.
63. Data Mining for Biomedical Informatics workshop (with SIAM-DM 2008)
64. WWW 2009
65. VLDB 2009, Lyon, France, 2009
66. SIGMOD 2010, Indianapolis, Indiana, June 2010.
67. KDD 2010 (Senior PC member), Washington, DC, July 2010.
68. HDMS 2010, Ayia Napa, Cyprus, July 2010.
69. WWW 2012 (Behavioral Analysis and Personalization track), April 16-20, Lyon France.
70. SIGMOD 2013, Area Chair (Graph Management, Social Networks), June 2013, NYC, NY, USA
71. WWW 2013, PC member (Web Mining track), May 2013, Rio de Janeiro, Brazil.
72. KDD'13 Senior PC member, Aug 11-14, Chicago, IL, USA.
73. WWW'14 PC member (Social Networks and Graph Analysis track).
74. SDM'14 Senior PC member.
75. KDD'14 Senior PC member.
76. KDD'14 Awards committe member
77. KDD'15 Senior PC member.

78. WWW'15 PC member (web mining track)
79. ICDE'16 PC member (research track)
80. KDD'16 Senior PC member (research track).
81. SDM'17 Senior PC member.
82. KDD'18 Senior PC member (research track)
83. KDD'19 Senior PC member (research track)
84. KDD'20 Senior PC member (research track)
85. KDD'21 Senior PC member (research track)
86. KDD'22 Senior PC member (research track)
87. KDD'26 Area Chair (AI for Sciences track)

PROPOSAL AND PANEL REVIEWS

1. Referee for several NSF proposals (1985-present);
2. Referee for a proposal to the Australian Research Grants Committee (1987).
3. Referee for proposals to the Natural Sciences and Engineering Research Council (NSERC) of Canada (1989, 1997, 2009).
4. Member of NSF Initiation Awards Panel (twice).
5. Member of NSF Proposal Review Panel (8 times).
6. Member of a NASA proposal review panel (NASA NRA-89-OSSA-21, "Applied Information Systems Research").
7. Member of a NASA proposal review panel (NASA NRA-93-OSSA-09), Sept. 1993.
8. Member of NSF site visit teams for CISE infrastructure grants (1996; 1997).
9. Referee for a proposal to the Israel Science Foundation (1998).
10. Referee for an NIH grant proposal (1998).
11. Referee for an EPET-II grant proposal to the Greek Ministry of Science and Technology (1999).
12. Referee for a proposal to the *Canada Foundation for Innovation* (CFI, 2007).

JOURNAL REVIEWS

- *ACM Computing Surveys* (1987,1994,1995), *ACM SIGIR-Forum* (1994), *ACM Trans. on Computer Systems* (1992), *ACM Trans. on Database Systems* (1986, 1987, 1992 (twice), 1994 (twice), 1995, 1997, 1998, 2001 (twice)), *ACM Trans. on Office Information Systems* (1987, 1988, twice in 1992, 1993, 1995), *Comm. of ACM* (1996) *Computers and Mathematics* (1995), *Distributed and Parallel Databases - An International Journal* (1993,1998), *IEEE Computer* (1987), (1995 twice), *IEEE Trans. on Computers* (1987, 1995), *IEEE Trans. on Circuits and Systems for Video Technology* (1997), *IEEE Trans. on Software Engineering* (1988, 1989, 1990, 1992), *IEEE Trans. on Knowledge and Data Engineering* (1989, 1990,1992, special issue on multimedia 1992, 1994, 1995 (3 times), 1996, 1998(twice)), *IEEE Trans. on Information Theory* (1990), *IEEE Trans. on Image Processing* (1995), *IEEE Trans. on PAMI* (1990), *IEEE Trans. on Parallel and Distributed Systems (TPDS)* (1995), *IEEE Press* (1996), *IEEE Trans. in Parallel and Distributed Systems* (1993, 1994), *Information Processing Letters (IPL)* (1996), *Information Processing and Management* (1987), *Information Systems* (1991,1992, 1994 (4 times), 1995 (4 times), 1996, 1997 *Information Sciences* (1992), *Journal of the American Society for Information Science (JASIS)* (1988), *Journal of ACM* (1989), *Journal of Computer and System Sciences* (1990, 1995, 1999), *Pattern Recognition Letters* (1995), *The Computer Journal* (1995), *Theoretical Computer Science* (1995), *SIAM* (1996). *VLDB Journal* (1993 (twice), 1996, 1997, 1998(twice), 1999),

CONFERENCE REVIEWS

- *Entity-Relationship* (1986, 1987), *ACM SIGMETRICS* (1990), *VLDB* (1991), *IEEE Data Engineering* (1993), *ACM-SIGMOD* (1993-twice, 1996), *ACM-GIS96* workshop. *PODS* (1997-4 times) *SIGMOD* (1998-3 times)

OTHERS

- External examiner for the Ph.D. dissertation of Mr. A.J. Kent (Royal Melbourne Institute of Technology, 1988).
- External examiner for the Ph.D. dissertation of Mr. Daniel Keim (Univ. of Munich, Germany, July 1997).
- External examiner for the Ph.D. dissertation of Mr. Kai Sang Leung (Univ. of British Columbia, Canada, Nov. 2002).

- External examiner for the Ph.D. dissertation of Mr. Periklis Andritsos (Univ. of Toronto, Canada, Sept. 2004).
- External examiner for the Ph.D. dissertation ('habilitation') of Mr. Peer Kroeger (Muenich Univ., Germany, Dec. 2008).
- Invited participant in the NSF sponsored *Uncertainty Management in Information Systems* (UMIS) Workshop, Catalina Island, CA, April 2-5, 1993.
- Invited participant in the NSF sponsored *Distributed Heterogeneous Knowledge Networks* workshop, Boulder, CO, May 8-9 1997.
- Invited speaker in the NSF sponsored *Mathematical Techinques to Mine Massive Data Sets* (M3D) workshop, Chicago, IL, July 12-15, 1997.
- Invited participant in the NSF sponsored workshop on *IR Tools*, Pittsburgh, PA, March 20-21, 1998.
- Invited participant and group discussion leader in the *1998 NSF Information and Data Management Workshop: Research Agenda for the 21st Century* Washington, D.C. March 29-31, 1998.
- Invited participant and group discussion leader in the *1999 NSF Information and Data Management Workshop*, Los Angeles, CA, March 1999.
- Invited participant and co-organizer in the *2000 NSF Information and Data Management Workshop*, Chicago, IL, March 2000.
- Referee for multiple promotion cases (5 in 2002, 5 in 2003, 7 in 2004, 4 in 2005, 7 in 2006, 14 in 2007; over 10 per year, since then).

UNIVERSITY SERVICES OTHER THAN TEACHING

1985-	Member, Information Processing Field Committee
1985-	Member, Information Processing Comprehensive Exam Committee
1985-86	Member, Graduate Admissions Committee
1986-87	Member, Colloquia Committee
1987	Chairman, Information Processing Comprehensive Exam Committee
1987-88	Member, Industrial Associates Program Committee
1988-89	Faculty advisor for ACM student chapter
1989	Member, CMSC112 Committee
1989-90	Member, Graduate Studies Committee (Pre-admissions advising)
10/1989	Member of an Ad Hoc Hearing Board on Academic Dishonesty.
3/1990	Member, CMSC 112 textbook Committee
1990-91	Member, Graduate Studies Committee (Pre-admissions advising)
1991	Member, Graduate Admissions Committee
1991-1992	Member, Graduate Studies Committee (Pre-admissions advising)
1992	Member, Graduate Admissions Committee (European, Latin and Middle East section)
1993-1994	TA orientation workshop; Undergraduate Studies committee member (evaluated undergraduate Departmental scholarships; acted as Liaison for the Dean's committee on Undergraduate Education; evaluated nominations for Teaching excellence awards); evaluated Greek applicants for graduate admissions; ISR Education Program Committee member (evaluated ISR fellowship applications; evaluated 150 applications for the 'Young Scholars' program).
1994	Undergraduate Studies Committee member; Lab Committee member; Academic Evaluations Committee member; ISR Education Program Committee member; ISR Facilities and Services Committee member.
1995	On leave
1996	Editor of the CS Annual Report; ISR Facilities and Services Committee member.

1996-97 Teaching Evaluation Committee member; Graduate Admissions.

1998-1999 (At CMU) Hiring committee in CSD; CALD advisory board; CALD summer course coordinator. Promotion committee for Profs Garth Gibson, Yiming Yang; one evaluation letter

1999-2000 Faculty Development Committee; head of SCS hiring sub-committee on DB/ML/IR; CALD hiring committee; CALD summer course co-organizer; One internal evaluation letter for promotion;

2000-2001 Head of promotion committee for Prof. Sebastian Thrun; Faculty Development Committee; member of CALD/Databases hiring sub-committee.

2001-2002 Guest lecture for "Andrew's Leap" (summer '01). Member of promotion committees of Todd Mowry, John Lafferty; two internal evaluation letters.

2002-2003 Guest Lecture for "Andrew's Leap" (summer '02). Internal evaluation letter. Recommendation letter for CMU non-SCS promotion. Member of SCS promotion committee. CSD Faculty Senator. Member of Systems hiring committee.

2003-2004 on sabbatical leave

2004-2005 CSD Faculty senator; nominated Ailamaki for Sloan; one internal promotion letter (CALD).

2005-2006 CSD Faculty senator; head of the reappointment committee for Chris Olston; Member of the Reappointments and Promotions Committee; 3 internal promotion/re-appointment letters (CALD, Stat, ECE).

2006-2007 Member of the promotion committee for Natassa Ailamaki; Member of the Reappointments and Promotions committee; Member of the PhD admissions committee; Head of the MLD hiring committee.

2007-2008 Member of the PhD admissions committee; Member of the promotion committee for Todd Mowry; 1 internal promotion letter; Member of the CSD hiring committee; Reviewer for the IBM-CMU Faculty awards proposals.

2008-2009 Member of the PhD admissions committee. Host for 2 faculty candidates. 2 internal SCS promotion letters

2009-2010 Organizer of the SCS Distinguished Lecture Series. 1 internal SCS promotion letter

2010-2011 On sabbatical; 1 internal SCS promotion letter

2011-2012 Member of CSD hiring committee; 1 internal SCS promotion letter

2012-2013 Member of MLD hiring committee; member of CSD hiring committee.

2013-2014 Member of the promotion committee for Geoff Gordon (MLD); member of hiring committee (CSD).

2014-2015 4 SCS internal promotion letters; member of MLD hiring committee.

2015-2016 Member of the committee for the Allen Newell Award for Research Excellence.

2016-2017 Member of the MLD hiring committee. Member of the committee for the Allen Newell Award for Research Excellence.

2017-2018 No service - on sabbatical at Amazon.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Member of the Institute of Electrical and Electronic Engineers (IEEE),
- Member of the Association for Computing Machinery (ACM) - Fellow grade.
- Member of the Technical Chamber of Greece (association of licensed engineers of Greece).

Table of Contents

PERSONAL 1
EDUCATION 1
UNIVERSITY EXPERIENCE 1
PUBLICATIONS 1
INVITED TALKS 23
TUTORIALS 27
GRANTS 29
FELLOWSHIPS AND AWARDS 33
BEST PAPER AWARDS 34
COURSES TAUGHT 36
TEACHING AWARDS 37
STUDENTS, THESES AND POSTDOCS DIRECTED 37
PROFESSIONAL SERVICE 44
UNIVERSITY SERVICES OTHER THAN TEACHING 48
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS 49