

Zhenzhen Kou

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OBJECTIVE

To find a permanent position in research labs or research-oriented companies.

RESEARCH INTERESTS

My main research interests are machine learning, especially statistical relational learning and graphical models, and data/text mining, especially relational data mining, text classification and information extraction. I also did projects on image analysis, design and implementation of a web interface to an SQL database.

EDUCATION

Carnegie Mellon University, Pittsburgh PA
Ph.D. in Machine Learning, Dec. 2007
Machine Learning Department, School of Computer Science
Dissertation Title: *Stacked Graphical Learning*
Advisor: William W. Cohen

Tsinghua University, Beijing, P. R. China
M.S. in Pattern Recognition and Intelligent System, June 2002
GPA: 90.2/100, ranked 1st in the class

Tsinghua University, Beijing, P. R. China
B. E. in Automation, June 2000
GPA: 88.0/100, ranked 2nd in the class

AWARDS & FELLOWSHIPS

Carnegie Mellon Research Fellowship, Aug. 2002 – Present
Tsinghua University Outstanding Student Scholarship, Nov. 2001.
Honor of Outstanding Graduate (awarded to top 2% graduates), Jun. 2000
Tsinghua University Outstanding Student Scholarship, 1996 ~ 1999

CONTESTS & PRIZES

Second Runner-up for Task 1 in KDD Cup 2007, Aug. 2007

PROFESSIONAL EXPERIENCE

Carnegie Mellon University, May. 2005 – Present
Research Assistant, CALO project
Research areas: information extraction, statistical relational learning, and data mining
(details in <http://www.cs.cmu.edu/~woomy>)

Carnegie Mellon University, Sep. 2002 –May. 2005

Research Assistant, SLIF project

Research areas: image analysis, named entity extraction, web interface design for an SQL database

IBM TJ Watson Research Center, May 2007 – Aug. 2007

Technical Co-op, Math. Dept.

Research: worked with Yan Liu to develop a link prediction model for movie recommendation, which ranks as the Second Runner-up in the KDD Cup 07 competition; compared the performance of several learning algorithms applied to job category classification for IBM employees

Tsinghua University, Aug. 2000 ~ June 2002

Research Assistant, Bioinformatics group

Research: worked on an image analysis system for curative effect judgement for Traditional Chinese Medicine. Research involved designing and implementing image processing algorithms for texture analysis and applying Statistical Learning Theory to image classifications.

Student Research Training (SRT) Program, Tsinghua University, Aug. 1998 ~ Aug. 1999

Designed and maintained the user interface of Open Bookmark Service System in Internet.

PUBLICATIONS

JOURNAL PUBLICATIONS

- **Zhenzhen Kou**, William W. Cohen and Robert F. Murphy (2005): *High-Recall Protein Entity Recognition Using a Dictionary*, Bioinformatics. 2005 Jun; 21 Suppl 1:i266-73.
- **Zhenzhen Kou**, Liang Ji and Xuegong Zhang(2001), *Karyotyping of CGH human metaphase by using support vector machines*, Cytometry, December 2001.

CONFERENCE PUBLICATIONS

- **Zhenzhen Kou**, Vitor R. Carvalho and William W. Cohen (2007): *Online Stacked Graphical Learning*, in NIPS 2007 Workshop on Efficient Machine Learning.
- Yan Liu and **Zhenzhen Kou** (2007): *Predicting Who Rated What in Large-Scale Datasets*, in Proceedings of KDD Cup and Workshop 2007, San Jose, CA, 2007.
- **Zhenzhen Kou** and William W. Cohen (2007): *Stacked Graphical Models for Efficient Inference in Markov Random Fields*, in SIAM International Conference on Data Mining (SDM07), Minneapolis, MN, 2007.
- **Zhenzhen Kou**, William W. Cohen and Robert F. Murphy (2007), *A Stacked Graphical Model for Associating Information from Text And Images In Figures*, in Pacific Symposium on Biocomputing (PSB 07), Maui, 2007.
- Robert F. Murphy, **Zhenzhen Kou**, Juchang Hua, Matthew Joffe and William W. Cohen (2004): *Extracting and Structuring Subcellular Location Information from On-line Journal Articles: The Subcellular Location Image Finder*, in Knowledge Sharing and Collaborative Engineering (KSCE 2004), Virgin Islands, 2004.
- **Zhenzhen Kou**, William W. Cohen and Robert F. Murphy (2003): *Extracting Information from Text and Images for Location Proteomics*, in 3rd Workshop on Data Mining in Bioinformatics (BIOKDD), Washington D.C., 2003.

- **Zhenzhen Kou**, Jianhua Xu, Xuegong Zhang and Liang Ji(2001), *An Improved Support Vector Machine Using Class-Median Vectors*, in 8th International Conference on Neural Information Processing, Shanghai, China, 2001.

TEACHING EXPERIENCE

- Teaching Assistant**, “Machine Learning(10-701)”, Carnegie Mellon University, *Jan. – May. 2005*
- Teaching Assistant**, “Database Applications(15-415)”, Carnegie Mellon University, *Aug. – Dec. 2005*
- Teaching Assistant**, “Signals and System Analysis”, Tsinghua University, *Sep. 2000 ~ Jan. 2001*

TALKS

- Oral Presentation**, “Predicting Who Rated What in Large-Scale Datasets”, in KDD Cup Workshop, San Jose, CA, Aug. 2007
- Oral Presentation**, “A Stacked Graphical Model for Associating Information from Text And Images In Figures”, in Pacific Symposium on Biocomputing (PSB), Maui, Jan. 2007
- Invited talk**, “Stacked Graphical Learning”, in Nielsen BuzzMetrics Pittsburgh, Oct. 2006
- Oral Presentation**, “High-Recall Protein Entity Recognition Using a Dictionary”, in 13th International Conference on Intelligent Systems for Molecular Biology (ISMB), Detroit, Aug. 2005
- Oral Presentation**, “Extracting Information from Text and Images for Location Proteomics”, in 3rd Workshop on Data Mining in Bioinformatics (BIOKDD), Washington D.C., Aug. 2003

PROFICIENCY

Languages: C, C++, Java, JavaScript, HTML, PHP, JSP, Perl, SQL, Matlab.

REFERENCES

William W. Cohen

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Robert F. Murphy

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