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EDUCATION

- 2002 – 2007 Doctor of Philosophy in Computer Science
University of California, Irvine
Dissertation Title: *Palantir: Enhancing Configuration Management Workspaces to Support Distributed Software Development*
Advisor: André van der Hoek
- 2000 – 2002 Master of Science in Computer Science
University of California, Irvine
Concentration: Software Engineering
- 1994 – 1998 Master of Management Studies
Birla Institute of Technology and Sciences (BITS)
Pilani, Rajasthan, India
Concentration: Finance and Software

EXPERIENCE

- 2008 – Present Post Doctoral Fellow
Carnegie Mellon University, Institute for Software Research
Area: Software Engineering, Computer Supported Cooperative Work
Advisor: James Herbsleb
- 2000 – 2007 University of California, Irvine, Donald Bren School of Information and Computer Sciences
Graduate Research Assistant (2001 – present)
Teaching Assistant (2000 – 2001)
- Summer 2004 IBM Research Labs, Collaborative User Experience group, Cambridge, MA
Intern
- Summer 2001 University of California, Irvine
COSMOS (California State Summer School for Mathematics and Sciences)
Instructor of Record
- 1998 – 2000 IMRglobal Limited, Mumbai, India
Module Leader (February 2000 – July 2000)
Programmer and Analyst (August 1998 – February 2000)
- Jan – Jul 1998 Industrial Development Bank of India, Mumbai, India
Intern
- Summer 1995 Indian Bank, Chennai, India
Intern

REFEREED JOURNAL PUBLICATIONS

- J.1 D. Redmiles, A. van der Hoek, B. Al-Ani, T. Hildenbrand, S. Quirk, A. Sarma, R. Silveira Silva Filho, C. de Souza, E. Trainer, *Continuous Coordination: A New Paradigm to Support Globally Distributed Software Development Projects*, In *Wirtschaftsinformatik*, 2007, 49 (Special Issue), pages S28-S38.
- J.2 B. Al-Ani, D. Redmiles, A. van der Hoek, M. Alvim, I. Almeida da Silva, N. Mangano, E. Trainer, A. Sarma, *Continuous Coordination within Software Engineering Teams: Concepts and Tool Support*, *Journal of Computer Science and Engineering in Arabic*, 2008 (to appear).
- J.3 A. Sarma and A. van der Hoek, *Coordination through Workspace Aware SCM Systems*, *IEEE Transactions of Software Engineering* (IN PREPARATION).

REFEREED CONFERENCE AND WORKSHOP PUBLICATIONS

- C.18 L. Maccherone, A.Sarma, P. Wagstrom, and J. Herbsleb, *Tesseract: Interactive Environment for Exploration of Project Relationships*, Formal Research Demonstration at International Conference on Software Engineering, Vancouver, Canada, May 2009, (to appear).
- C.17 A.Sarma, L. Maccherone, P. Wagstrom, and J. Herbsleb, *Tesseract: Interactive Visual Exploration of Socio-Technical Relationships in Software Development*, Proceedings of the Thirty-first International Conference on Software Engineering, Vancouver, Canada, May 2009, (to appear).
- C. 16 A. Sarma, D. Redmiles, , and A. van der Hoek, *Empirical Evidence of the Benefits of Workspace Awareness in Software Configuration Management*, ACM SIGSOFT International Symposium on the Foundations of Software Engineering, (FSE 16), Atlanta, Georgia, November 2008, pages 113-123.
- C. 15 B. Al-Ani, E. Trainer, R. Ripley, A. Sarma, A. van der Hoek, and David Redmiles, *Continuous Coordination within the Context of Cooperative and Human Aspects of Software Engineering*, International Workshop on Cooperative and Human Aspects of Software Engineering, May 2008, pages 1-4.
- C.14 A. Sarma, G. Bortis, and A. van der Hoek, *Towards Supporting Awareness of Indirect Conflicts across Software Configuration Management Workspaces*, Twenty second IEEE/ACM International Conference on Automated Software Engineering (ASE), Atlanta, Georgia, November 2007, pages 94–103.
- C.13 A. Sarma, D. Redmiles, and A. van der Hoek, *A Comprehensive Evaluation of Workspace Awareness in Software Configuration Management Systems*, Short paper in IEEE Symposium on Visual Languages and Human-Centric Computing, Coeur d'Aléne, Idaho, September 2007, pages 23–26
- C.12 I. da Silva, M. Alvim, R. Ripley, A. Sarma, C. Werner, and A. van der Hoek, *Designing Software Cockpits for Coordinating Distributed Software Development*, First Workshop on Measurement-based Cockpits for Distributed Software and Systems Engineering Projects, Munich, Germany, August 2007, pages 14-18 (electronic proceedings).
- C.11 R. Ripley, A. Sarma, and A. van der Hoek, *A Visualization for Software Project Awareness and Evolution*, Fourth International Workshop on Visualizing Software for Understanding and Analysis (VISSOFT), Alberta, Canada, June 2007, pages 137-144.
- C.10 B. Al-Ani, A. Sarma, G. Bortis, I. Almeida da Silva, E. Trainer, A. van der Hoek, and D. Redmiles, *Continuous Coordination (CC): A New Collaboration Paradigm*, CSCW Workshop on Supporting the Social Side of Large Scale Software Development, Banff, Canada, November 2006, pages 69-72.

- C.9 A. Sarma and A. van der Hoek, *Towards Awareness in the Large*, Proceedings in the International Conference on Global Software Engineering, Florianópolis, Brazil, October 2006, pages 127-131.
- C.8 A. Sarma, A. van der Hoek, and L-T, Cheng, *A Need-Based Collaboration Classification Framework*, Proceedings of Eclipse as a Vehicle for CSCW Research Workshop, Chicago, USA, November 2004, pages 16–20 (also available as IBM Technical Report RC23339).
- C.7 R. Ripley, A. Sarma, and A. van der Hoek, *Workspace Awareness in Application Development*, Proceedings of Eclipse Technology eXchange Workshop, Vancouver, Canada, October 2004, pages 17–21.
- C.6 A. Sarma and A. van der Hoek, *A Conflict Detected Earlier is a Conflict Resolved Easier*, Proceedings of the Fourth Workshop on Open Source Software Engineering, Edinburgh, UK, May 2004, pages 82–86.
- C.5 A. van der Hoek, D. Redmiles, P. Dourish, A. Sarma, R. S. Filho, and C. de Souza, *Continuous Coordination: A New Paradigm for Collaborative Software Engineering Tools*, Proceedings of the Workshop on Directions in Software Engineering Environments, Edinburgh, UK, May 2004, pages 29–36.
- C.4 A. Sarma and A. van der Hoek, *Visualizing Parallel Workspace Activities*, Proceedings of the IASTED International Conference on Software Engineering and Applications, Marina Del Rey, California, USA, November 2003, pages 435–440.
- C.3 A. Sarma, Z. Noroozi, and A. van der Hoek, *Palantír: Raising Awareness among Configuration Management Workspaces*, Proceedings of the Twenty-fifth International Conference on Software Engineering, Portland, Oregon, USA, May 2003, pages 444–454.
- C.2 A. Sarma and A. van der Hoek, *Palantír: Coordinating Distributed Workspaces*, Proceedings of the Workshop on Cooperative Support for Distributed Software Engineering Processes, Oxford, UK, August 2002, pages 1093–1097.
- C.1 A. Sarma and A. van der Hoek, *Palantír: Increasing Awareness in Distributed Software Development*, Proceedings of the Second Workshop on Global Software Development, Orlando, Florida, USA, May 2002, pages 28–32.

OTHER PUBLICATIONS

- O.11 J.D. Herbsleb, L. Dabbish, P. Wagstrom, A. Sarma, *Supporting Coordination of Work*, Paper in Human Computer Interaction Consortium (HCIC), Fraser, CO, USA, February 2009. (to appear).
- O.10 P. Wagstrom, L. Dabbish, A. Sarma, and J. Herbsleb, *Understanding the Collaboration Needs of a Developing Distributed Team*, Workshop on Supporting Distributed Team Work at CSCW 2008, San Diego, CA.
- O.9 J. Herbsleb, L. Dabbish, P. Wagstrom, and A. Sarma, *Theory and Analysis of Closely-Coupled Production Work*, Workshop on Supporting Distributed Team Work at CSCW 2008, San Diego, CA.
- O.8 A. Sarma, J. Herbsleb, *Exploring Interrelationships among Project Entities to Support Coordination in Distributed Teams*, workshop on Supporting Distributed Team Work at CSCW 2008, San Diego, CA. Available as a Technical Report CMU-ISR-08-138, Carnegie Mellon University, Institute for Software Research International, Pittsburgh, 2008.
- O.7 A. Sarma, J. Herbsleb, A. Mockus, M. Cataldo, *Using Distributed Constraint Satisfaction to Build a Theory of Congruence*, workshop on Socio-Technical Congruence, Collocated with ICSE 2008, Leipzig, Germany. Available as a Technical Report CMU-ISR-08-107, Carnegie Mellon University, Institute for Software Research International, Pittsburgh, 2008.

- O.6 A. Sarma and J. Herbsleb, Using Development Experience to Calculate Congruence, workshop on Socio-Technical Congruence, Collocated with ICSE 2008, Leipzig, Germany. Available as a Technical Report CMU-ISR-08-106, Carnegie Mellon University, Institute for Software Research International, Pittsburgh, 2008.
- O.5 A. Sarma, J. Herbsleb, and A. van der Hoek, Challenges in Measuring, Understanding, and Achieving Social-Technical Congruence, workshop on Socio-Technical Congruence, Collocated with ICSE 2008, Leipzig, Germany. Available as a Technical Report CMU-ISR-08-105, Carnegie Mellon University, Institute for Software Research International, Pittsburgh, 2008.
- O.4 A. Sarma, *Palantir: Coordinating Distributed Software Development through Awareness*, Invited student paper in Human Computer Interaction Consortium (HCIC), Fraser, CO, USA, January 2006.
- O.3 D. Redmiles, A. van der Hoek, A. Sarma, C. de Souza, E. Trainer, S. Quirk, and R. de Paula, *Unifying Formal and Informal Coordination through Continuous Coordination*, Paper in Human Computer Interaction Consortium (HCIC), Fraser, CO, USA, January 2006.
- O.2 A. Sarma, *Contextualized Awareness: A Lynchpin of Software Development*, CSCW Workshop on Awareness in Activity-Centric Groupware Design, Banff, Canada, November 2006.
- O.1 A. Sarma, *Configuration Management Workspace Awareness for Distributed Software Development*, Doctoral Symposium at the European Software Engineering Conference together with ACM SIGSOFT Symposium on the Foundations of Software Engineering (ESEC/FSE), Helsinki, Finland, September 2003.

TECHNICAL REPORTS

- T.5 A. Sarma, G. Bortis, and A. van der Hoek, *Cross-Workspace Impact Awareness for Early Detection of API-induced Indirect Conflicts in Configuration Management*. Technical Report, UCI-ISR-06-17, University of California, Irvine, Institute for Software Research, December 2006.
- T.4 R. Ripley, A. Sarma, and A. van der Hoek, *Using Visualizations to Analyze Workspace Activity and Discern Software Project Evolution*, Technical Report, UCI-ISR-06-1, University of California, Irvine, Institute for Software Research, January 2006.
- T.3 A. Sarma, *A Survey of Collaborative Tools in Software Development*, Technical Report, UCI-ISR-05-3, University of California, Irvine, Institute for Software Research, March 2005.
- T.2 A. Sarma and A. van der Hoek, *A Need Hierarchy for Team*, Technical Report, UCI-ISR-04-9, University of California, Irvine, Institute for Software Research, October 2004.
- T.1 A. Sarma and A. van der Hoek, *Visualizing Parallel Workspace Activities*, Technical Report, UCI-ISR-02-8, University of California, Irvine, Institute for Software Research, January 2003.

MANUSCRIPT IN SUBMISSION

- M.1 A. Sarma, D.F. Redmiles, A. van der Hoek, *The Coordination Pyramid: A Perspective on the State of the Art in Coordination Technology*, IEEE Computer.
- M.2 A. Sarma, B. Al-Ani, E. Trainer, R.S. Silva Filho, I. da Silva, D. Redmiles, A. van der Hoek, *Continuous Coordination Tools and their Evaluation*, book chapter for Collaborative Software Engineering (CoSE), Editors: A. Finkelstein, J.Grundy, A, van der Hoek, I. Mistrík, and Jim Whitehead, Springer-Verlag/Computer Science Editorial.

PRESENTATIONS

- P.21 November 2008, Foundations of Software Engineering, (FSE 16), Atlanta, Georgia
- P.20 November 2008, Workshop on Supporting Distributed Team Work, San Diego, CA
- P.19 November 2007, International Conference on Automated Software Engineering (ASE), Atlanta, Georgia
- P.18 April 2007, University of Wisconsin, Milwaukee, WI, USA
- P.17 April 2007, University of Houston, Houston, TX, USA
- P.16 February 2007, Microsoft Research, Human Interactions in Programming group, Redmond, WA, USA
- P.15 November 2006, Workshop on Awareness in Activity-Centric Groupware Design, Banff, Alberta, Canada
- P.14 July 2006, University of Maryland, Baltimore County, MD, USA
- P.13 June 2006, Graduate Student Research Symposium, University of California, Irvine (invited panel)
- P.12 April 2006, Graduate School Information Panel, Women in Computer Science (WICS), University of California, Irvine (invited panel)
- P.11 February 2006, Brea Olinda High School, Brea, CA, USA
- P.10 January 2006, University of Colorado at Boulder, Boulder, CO, USA
- P.9 November 2004, Workshop on Eclipse as a Vehicle for CSCW Research, Chicago, IL, USA
- P.8 August 2004, IBM Research Labs, Collaborative User Experience Group, Cambridge, MA, USA
- P.7 May 2004, Workshop on Open Source Software Engineering, Edinburgh, UK
- P.6 March 2004, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
- P.5 January 2004, Association for Configuration and Data Management, Anaheim, CA, USA
- P.4 November 2003, International Conference on Software Engineering and Applications, Marina Del Rey, CA, USA
- P.3 September 2003, Doctoral Symposium, ESEC/FSE, Helsinki, Finland
- P.2 August 2002, Workshop on Cooperative Supports for Distributed Software Engineering Processes, Oxford, UK
- P.1 May 2002, ICSE 2002 Workshop on Global Software Development at the Twenty-fourth International Conference on Software Engineering, Orlando, FL, USA

TEACHING

<i>Instructor of Record</i>	COSMOS (California State Summer School for Mathematics & Science, UCI)
<i>Teaching Assistant</i>	ICS 184 Introduction to Database Management (ICS, UCI)
	ICS 121 Software Tools and Methods (ICS, UCI; 2 times)
	MGSYS Operations Research (RDSO, Birla Institute of Technology and Sciences, Pilani, India)

MISCELLANEOUS ACTIVITIES

Reading group leader (Jan – May 2008) Large Scale Visualization, Carnegie Mellon University
Reading group leader (Sep – Dec 2008) Coordination, Technology, and Distributed work, Carnegie Mellon University

STUDENTS SUPERVISED

Undergraduate Students

Kyle Strasser	IN4MATX, UCI, graduated 2007
Jonathan Su	ICS, UCI, graduated 2006
Steve Bonica	ICS, UCI, graduated 2005
Eric Hettwer	ICS, UCI, graduated 2005
Ksatria Williams	ICS, UCI, graduated 2004
Peggy Lin	ICS, UCI, graduated 2003
Zahra Noroozi	ICS, UCI, graduated 2002

Graduate Students

Roger Ripley	ICS, UCI, MS, graduated 2004
Ryan Yasui	ICS, UCI, MS, graduated 2004
Isabella da Silva	UFRJ, COPPE, MS, graduated 2008

SERVICE TO THE COMMUNITY

Program Committee member

- Mini track on Concepts, Methods, and Tools for Collaborative IS Development at HICCS 2009
- Workshop on Socio-Technical Congruence, collocated with ICSE 2008
- Workshop on Supporting Distributed Team Work, collocated with CSCW 2008 (organizer)
- Workshop on Infrastructure for Research in Collaborative Software Engineering, collocated with FSE 2008
- International Conference on Global Software Engineering, 2007
- IASTED International Conference on Software Engineering and Applications, 2003

Journal Reviews

- IEEE Transactions on Software Engineering, 2009
- Empirical Software Engineering, 2008
- The Computer Supported Cooperative Work Journal, 2008
- IEEE Software, special issue on Data mining, 2008
- Journal of Software Maintenance and Evolution: Research and Practice, 2008
- International Journal of Human-Computer Studies, 2007
- Journal of Zhejiang University Science A – Applied Physics and Engineering, 2007

Reviewer

- Computer Human Interaction (CHI 2008, CHI 2009)
- Computer Supported Cooperative Work (CSCW 2008)

Secondary Reviewer

- Eleventh European Software Engineering Conference together with the Fifteenth ACM SIGSOFT Symposium on Foundations of Software Engineering (ESEC/FSE 2007)
- Twenty-second IEEE/ACM International Conference on Automated Software Engineering (ASE 2007)

- Joint Tenth European Software Engineering Conference and the Thirteenth ACM SIGSOFT Symposium on Foundations of Software Engineering (ESEC/FSE 2005)
- Twenty-sixth International Conference on Software Engineering (ICSE 2004)
- Twelfth International Symposium on Software Configuration Management (2004)
- Second Workshop on Cooperative Supports for Distributed Software Engineering Processes (COMPSAC 2003)
- Eleventh International Symposium on Software Configuration Management (2003)

PROFESSIONAL AFFILIATIONS

- 2002 – Present Association for Computing Machinery (ACM)
 2002 – Present Association for Computing Machinery Special Interest Group on Software Engineering (ACM SIGSOFT)
 2001 – Present Institute of Electrical and Electronics Engineers (IEEE)

AWARDS

- 2007 UC Irvine Donald Bren School of Information and Computer Sciences Dissertation Fellowship Recipient
 2006 UMBC NSF ADVANCE Scholarship to attend Faculty Horizons, a workshop for aspiring STEM (Science, Technology, Engineering, and Mathematics) faculty
 2006, 2004 UCI, Ada Byron Research Center for diversity in computing and information technology, student scholarship for Grace Hopper Celebration of Women in Computing (GHC)
 2003 Donald Bren School of Information and Computer Sciences Summer Scholarship for Outstanding Students, University of California, Irvine
 2000 Donald Bren School of Information and Computer Sciences Fellowship, University of California, Irvine

GRANTS

- 2009 IBM JAZZ Innovation Grant (significant contributor to text of proposal; award made to my advisor J. Herbsleb)
 2008 IBM JAZZ Faculty Grant (significant contributor to text of proposal; award made to my advisor J. Herbsleb)
 2004 IBM Eclipse Innovation Grant (significant contributor to text of proposal; award made to my supervisor A. van der Hoek)