

Swapneel Sheth

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Education

Columbia University, New York, NY

Ph.D. in Computer Science, Expected December 2013

Thesis title: "Societal Computing: Exploring the Computational Tradeoffs of Societal Concerns such as Privacy and Green Computing"

Advisor: Professor Gail Kaiser

Columbia University, New York, NY

MS in Computer Science, December 2007 (GPA 4.1/4.0)

Mumbai University, Sardar Patel College of Engineering, Mumbai, India

BE in Computer Engineering, May 2006 (69%, 2nd in class)

Research Interests

Software engineering, privacy, computer science education, social software engineering

Awards and Honors

Andrew P. Kosoresow Memorial Award for Excellence in Teaching and Service, Columbia University Dept. of Computer Science. Given to a Ph.D. student for outstanding contributions to teaching in the Department and exemplary service to the Department and its mission. 2011.

University of Szeged Special Support Grant for PhD Working Groups, 8th Joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE. 2011.

Teaching Experience

Courses taught at Columbia University

- COMS 1007 Honors Introduction to Computer Science: Spring 2013 (89 students)
- COMS 4156 Advanced Software Engineering: Fall 2012 (84 students)
- COMS 1007 Object-Oriented Programming and Design in Java: Spring 2012 (129 students)
- COMS 3134 Data Structures in Java: Fall 2011 (46 students)
- COMS 1001 Introduction to Information Science: Spring 2011 (45 students)

Courses TA'd at Columbia University

- COMS 1004 Introduction to Computer Science and Programming in Java: Fall 2010, Summer 2010, Summer 2009
- COMS 4156 Advanced Software Engineering: Summer 2010, Summer 2009, Fall 2008, Spring 2008, Fall 2006
- COMS 6125 Web Enhanced Information Management: Spring 2010, Spring 2009, Summer 2008, Spring 2008
- COMS 1007 Object-Oriented Programming and Design in Java: Summer 2008

Professional and Research Experience

Preceptor (Graduate Student Instructor), January 2011 - present
Columbia University, Dept. of Computer Science, New York, NY
Taught 4 undergraduate classes and 1 graduate class.

Graduate Research Assistant, January 2007 - present
Columbia University, Dept. of Computer Science, New York, NY
Working on a project called “Societal Computing” that explores the impact of computational trade-offs on societal concerns such as Privacy, Green Computing, Sustainability, and Cultural Differences. Past projects include “HALO (Highly Addictive socialLly Optimized) Software Engineering” — applying engaging qualities of games to software engineering to make it more fun and social; “genSpace” — exploring knowledge sharing and recommender systems for scientific collaborative work.

Summer Intern, June - August 2007
Intelligent Search Technologies Ltd., White Plains, NY
Implemented a Module for Transliteration in C and ported the code to Windows, Linux, Solaris, HP UX, and AIX and wrote wrappers in Ruby enabling clients who use Ruby to integrate legacy C code through Shared Objects (DLLs and .so).

Intern, January - February 2006
Atos Origin, Torino, Italy
Student Intern for the Winter Olympics 2006 at Torino, Italy; 1 out of 25 students selected worldwide for the Olympic Intern Program; Managed the Technology Help Desk at Cesana Pariol and headed a team of 20+ volunteers; Responsible for providing On-Venue support to customers such as Torino Olympic Committee, Kodak, Lenovo, and Omega.

Publications

S. Sheth. *Societal Computing*. Proc. of the 2012 International Conference on Software Engineering (ICSE) Doctoral Symposium, Zurich, Switzerland, June 2012.

S. Sheth, G. Kaiser. *The Tradeoffs of Societal Computing*. Proc. of Onward! 2011 - ACM Symposium on New Ideas in Programming and Reflections on Software - Essays Track, Portland, Oregon, October 2011.

J. Bell, **S. Sheth**, G. Kaiser. *Secret Ninja Testing with HALO Software Engineering*. Proc. of the 4th International Workshop on Social Software Engineering (SSE), Szeged, Hungary, September 2011.

S. Sheth, J. Bell, G. Kaiser. *HALO (Highly Addictive, socially Optimized) Software Engineering*. Proc. of the 1st International Workshop on Games and Software (GAS), Honolulu, Hawaii, May 2011.

S. Sheth, G. Kaiser. *Towards using Cached Data Mining for Large Scale Recommender Systems*. Proc. of the 2011 International Conference on Data Engineering and Internet Technology (DEIT 2011), Bali, Indonesia, March 2011.

S. Sheth, N. Arora, C. Murphy, G. Kaiser. *The weHelp Reference Architecture for Community-Driven Recommender Systems — Short Position Paper*. Proc. of the 2nd International Workshop on Recommendation Systems for Software Engineering (RSSE), Cape Town, South Africa, May 2010.

S. Sheth, N. Arora, C. Murphy, G. Kaiser. *weHelp: A Reference Architecture for Social Recommender Systems*. Proc. of the 3rd International Workshop on Social Software Engineering (SSE),

Paderborn, Germany, February 2010.

C. Murphy, **S. Sheth**, G. Kaiser, L. Wilcox. *genSpace: Exploring Social Networking Metaphors for Knowledge Sharing and Scientific Collaborative Work*. Proc. of the 1st International Workshop on Social Software Engineering and Applications (SoSEA), L'Aquila, Italy, September 2008.

Service

Organizer, 2nd International Workshop on Games and Software Engineering (GAS): Realizing User Engagement with Game Engineering Techniques.
Zurich, Switzerland, June 2012.

TA Coordinator

Columbia University, Dept. of Computer Science, Spring 2009 - present
Supervised and trained undergraduate and graduate teaching assistants.

IEEE

Member, since 2004
Student Chapter Vice President, 2004-2005.

Student Advising

Kunal Ghogale, “User Survey on Importance of Privacy in Software Engineering”, graduate research, Columbia University, Fall 2012.

Priyank Singhal, “Privacy Settings in Recommender Systems”, graduate research, Columbia University, Fall 2012.

Morris Hopkins and Ami Kumar, “Software Testing for Privacy”, undergraduate research, Columbia University, Fall 2012.

Muzi Gao, “Privacy Requirements in Software Engineering”, graduate research, Columbia University, Spring 2012 - Fall 2012.

Lakshya Bhagat, Zhou Ma, and Shuaishuai Nie, “Survey on Recommender Systems and Privacy”, graduate research, Columbia University, Spring 2012.

Mohan Kolli, “Facebook and Privacy”, graduate research, Columbia University, Fall 2011.

Flavio Palandri Antonelli, “Enhancing Workflow Modeling and Management in genSpace”, graduate research, Columbia University, Summer - Fall 2010.

Eliane Kabkab, “Usability Study of genSpace”, graduate research, Columbia University, Spring 2010 - Fall 2010.

Danielle Cauthen, “Enhancing the Web Portal for genSpace”, independent graduate study, Columbia University, Fall 2010.

Scott Rogowski, “Statistical Analysis of Conference Papers”, undergraduate research, Columbia University, Fall 2010.

Yuan Wang and Eric Schmidt, “Cache Evaluation of genSpace”, graduate research, Columbia University, Fall 2009.

Palak Baid and Jau Yuan Chen, “Cloudview: Using peers to debug and diagnose application faults”, graduate research, Columbia University, Spring 2009 - Fall 2009.

Jonathan Bell, “Enhancing collaborative work in genSpace”, undergraduate research, Columbia University, Fall 2009 - Spring 2010.

Joshua Nankin, Anureet Dhillon, Gaurav Pander, Koichiro Matsunaga, Gowri Kanugovi, Hyuksoo Seo, Lakshmi Nadig, and Mayur Lodha, “Data Mining, User Experience, and Security in genSpace”, graduate research, Columbia University, Fall 2008.

Cheng Niu, “Real-time Recommendations in genSpace”, graduate research, Columbia University, Summer 2008 - Fall 2008.