

Aarathi Prasad

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EDUCATION

- *PhD*, Computer Science, Expected date of completion: May 2016
Dartmouth College, Hanover, NH
Advisor: David Kotz
Thesis: Privacy-preserving Sharing Controls for Mobile Devices
- *M.S*, Computer Science, 2012
Dartmouth College, Hanover, NH
Advisor: David Kotz
Thesis: Exposing Privacy Concerns in mHealth data sharing
- *BTech*, Computer Science and Engineering, 2007
National Institute of Technology, Calicut, India

WORK EXPERIENCE

- *Privacy Research Intern, Intel Labs, Hillsboro, OR*, 2014
- *Software Engineer, Oracle Corporation, Hyderabad, India*, 2007 - 2009

RESEARCH INTERESTS

- Usable Security and Privacy
- Smartphone and Wearable Device Security
- Mobile Health Applications and Internet of Things

TEACHING AND MENTORING EXPERIENCE

- Teaching Assistant for new CS class for majors on User Interface Design. 2011
 - Assisted professor in designing course material
 - Assisted students with homeworks and class projects during office hours
 - Graded homeworks and class projects
- Mentor for undergraduate female students as part of Women in Science Project (WISP). 2011, 2013
- Mentor for undergraduate senior thesis student. 2011-2012
- Instructor at after-school programming classes at local high schools. 2012
- Instructor for summer camps on robotics and cyber security. 2010, 2011, 2012

RESEARCH EXPERIENCE

- PhD student, Dartmouth College, 2011-Present
 - Developing smartphone-based frameworks for altruistic sharing by smartphone users based on spatial-temporal proximity.
 - Developed a mobile application extension framework (using Android SDK and Ruby on Rails) to collect and share context as evidence to help people understand the meaning of remotely collected health data.
 - Collaborated with researchers at Rice University and IIT Delhi to develop a contextual evidence storage system and add face verification capability to a mobile spirometer (using Matlab).
 - Visited rural villages in India to study the workflow of rural health clinics and to conduct an ethnographic study of health workers, clinicians and operators who enter data into electronic health records.

- Privacy Research Intern, Intel Labs, 2014
 - Conducted exploratory interviews and designed privacy controls to help users better understand what data to share when using mobile technologies.
- M.S student, Dartmouth College, 2009-2012
 - Collaborated with interdisciplinary team from Institute of Security, Technology and Society (ISTS) to understand individuals' privacy concerns with the use of mobile and wearable health- monitoring devices through focus groups, interviews and user studies.
 - Developed web application using Ruby on Rails and MySQL and conducted data analysis using R, for user studies.

MANUSCRIPTS IN PREPARATION

- Aarathi Prasad, Xiaohui Liang and David Kotz. *Privacy-preserving Contact Tracing using Smartphones.*
- Aarathi Prasad, Xiaohui Liang and David Kotz. *SPICE: Secure Proximity-based Infrastructure for Context Exchange.*
- Aarathi Prasad and David Kotz. *OCEAN: Open Contextual Evidence Add-On for Mobile Applications.*

PEER- REVIEWED PUBLICATIONS

- Aarathi Prasad, Xiaohui Liang and David Kotz. *Poster: Balancing Disclosure and Utility of Personal Information. In Proceedings of the International Conference on Mobile Systems, Applications, and Services (MobiSys)*, June, 2014. ACM Press. DOI 10.1145/2594368.2601448.
- Aarathi Prasad, Jacob Sorber, Timothy Stablein, Denise Anthony and David Kotz. *Understanding User Privacy Preferences for mHealth Data Sharing. Mobile Health (mHealth): Multidisciplinary Verticals*, Chapter 32, Taylor & Francis (CRC Press), 2014.
- Aarathi Prasad, Ronald Peterson, Shrirang Mare, Jacob Sorber, Kolin Paul and David Kotz. *Provenance framework for mHealth. In Workshop on Networked Healthcare Systems*, January, 2013. IEEE Computer Society Press.
- Aarathi Prasad, Ronald Peterson, Jacob Sorber and David Kotz. *A Provenance Framework for mHealth. In Proceedings of the Workshop for Mobile Systems, Applications, and Services for Healthcare (mHealthSys) Poster Track*, November, 2012. ACM Press.
- Aarathi Prasad, Jacob Sorber, Timothy Stablein, Denise Anthony and David Kotz. *Understanding Sharing Preferences and Behavior for mHealth Devices. In Workshop on Privacy in the Electronic Society (WPES)*, October 2012, Raleigh.
- Jacob Sorber, Minh Shin, Ronald Peterson, Cory Cornelius, Shrirang Mare, Aarathi Prasad, Zachary Marois, Emma Smithayer, David Kotz. *An Amulet for trustworthy wearable mHealth. In Workshop on Mobile Computing Systems and Applications (HotMobile)*, pages 7:1-7:6, February, 2012. DOI 10.1145/2162081.2162092.
- Aarathi Prasad, Jacob Sorber, Timothy Stablein, Denise Anthony and David Kotz. *Exposing privacy concerns in mHealth. In USENIX Workshop on Health Security (HealthSec)*, August, 2011. Position paper.
- Aarathi Prasad and David Kotz. *Can I access your Data? Privacy Management in mHealth. In USENIX Workshop on Health Security (HealthSec)*, August 2010. Position paper.

NON-REFEREED PUBLICATIONS

- Aarathi Prasad, Michael Butkiewicz. *HotMobile 2013, IEEE Pervasive Computing, vol.12, no.3, pp. 85-88, July-Sept 2013, doi:10.1109/MPRV.2013.50*
- Aarathi Prasad. Exposing Privacy Concerns in mHealth Data Sharing. *Masters Thesis, Dartmouth College Computer Science, February, 2012. Available as Technical Report TR2012-711.*

PROFESSIONAL SKILLS

- *General Co-Chair, PhD Forum, International Conference on Mobile Systems, Applications, and Services (MobiSys).* 2014
- *Co-Founder and Board Member, Dartmouth Indian Graduate Student Association.* 2015-2016
- *Co-Chair, Dartmouth Graduate Women in Science and Engineering.* 2012-2013
 - Co-founder of Science Day at Dartmouth for high school and middle school students from local schools (grown from 100 to 200 participants).
 - Organized professional and social events for graduate students (about 30-100 attendees).
- *Member of Organizing Committee, Dartmouth Computer Science Research Symposium (120 attendees).* 2012
- *Dartmouth Graduate Student Leader.* Participated in team development exercises. 2011-2013
- *Vice President, Dartmouth Graduate Student Council (GSC).* 2011-2012
 - Worked as a liaison between the college administration and graduate students.
 - Founded the graduate student organizations fair.
 - Founded the GSC Web Team, to maintain the GSC website.
 - Organized donation drive to help support Hurricane Irene recovery efforts.
- *Secretary, Dartmouth Graduate Student Council.* 2010-2011
 - Introduced electronic voting for GSC department representative elections.
- *Board member, Shanti, Dartmouth Hindu Student Organization.* 2010-Present
 - Organized Diwali celebrations (700 attendees), visiting artist performances (200 attendees) and religious talks (100 attendees).

REFERENCES

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