

Sneha R. Krishna Kumaran

Human Computer Interaction at University of Illinois Urbana Champaign
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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA CHAMPAIGN, Urbana, IL

August 2015—Expected May 2020

PhD, Computer Science, GPA: 4.00/4.00

Concentration: Human-Computer Interaction

Advisor: Brian P. Bailey

OREGON STATE UNIVERSITY, Corvallis, OR

September 2012—June 2015

BS, Computer Science, GPA: 3.98/4.00,

Thesis: "Identifying a Ranking of Plant Preferences for a Pollinator"

Advisor: Rebecca Hutchinson, Thomas G. Dietterich

EXPERIENCE

UNIVERSITY OF ILLINOIS URBANA CHAMPAIGN, Urbana, IL.

August 2015 – Present

Graduate Research Assistant, ORCHID Research Group, Advisor: Brian P. Bailey

My work focuses on how to improve feedback generation online by using existing research on peer evaluation to design novel interfaces. Such interfaces include showing the history of a project to a feedback provider and having a mentorship model to provide feedback. To test these, I have conducted long-term field experiments (A/B testing in a semester-long class) and used mixed-methods analysis.

BOSCH, Pittsburgh, PA.

May 2017—August 2017

Research Intern, Host: Lisa Yu

Developed a MEAN based social community for expert technicians to share their knowledge and novices to learn. Another project involved developing a method to match teams within a large corporation for increased collaboration.

INTEL CORPORATION, Hillsboro, OR.

June 2015 – August 2015

Validation Intern, Hosts: Sushmith Hiremath, Alexander Gutkin

Developed a kernel driver for firmware security validation of Intel's Xeon Phi software stack and added two modules to test for unique CPU APIC IDs and correct register access types utilizing Python and C++ extensions.

OREGON STATE UNIVERSITY, Corvallis, OR

September 2013 – June 2015

Undergraduate Research Assistant, Advisors: Rebecca Hutchinson, Thomas G. Dietterich

Modeled insect interaction with various plant species in a meadow using the multinomial model and gradient descent in an interdisciplinary project. During the modeling process, we found that a naïve model does not explain the visiting behavior of insects. Our findings corroborated with hypotheses by biologists that insects have preferences for which plants to visit. This work cumulated in an undergraduate thesis.

INTEL CORPORATION, Hillsboro, OR.

June 2014 – September 2014

Software Engineering Intern, Hosts: Sushmith Hiremath, Alexander Gutkin

Automated tests and created regression tests for the security team of the Intel Xeon Phi software stack for Linux and Windows. Worked autonomously to write several shell scripts for Linux and Windows to help the automation of the tests.

OREGON STATE UNIVERSITY, Corvallis, OR

September 2012–June 2015

Undergraduate Teaching Assistant

Lead labs for the Introduction to Computer Science sequence. Also conducted online tutoring sessions for advanced topics, such as algorithms and discrete mathematics, as part of an innovative program to improve distance education.

SKILLS/COURSEWORK

Qualitative Methods: Interviews, Usability testing

Quantitative Methods: Statistics, Survey design, Regression, Hierarchical statistical methods

Programming Languages: Python, R, JavaScript and JavaScript Libraries, HTML, SQL

Courses: Research methods in Human-Computer Interaction, Introduction to Human-Computer Interaction, User-Interface Design, Data-Driven Design, Cyber-Physical-Human Systems, Cognitive Science, Computer Vision, Natural Language Processing, Machine Learning

TEACHING/SERVICE

PURE Research Mentor

January 2018-May 2018

Mentored undergraduate women in computer science to implement a research prototype. In addition to helping them gain technical and research skills,

Graduate Teaching Assistant

January 2018-May 2018

TA for the graduate level course in Human Computer Interaction. Duties included grading and directing students through their term projects.

Undergraduate Teaching Assistant

September 2012-June 2015

Lead labs for the Introduction to Computer Science sequence. Also conducted online tutoring sessions for advanced topics, such as algorithms and discrete mathematics, as part of an innovative program to improve distance education.

Graduate Ambassador

2016-2018

Helped the computer science graduate admissions to organize a graduate women in computer science session during the graduate student recruitment weekend.

PUBLICATIONS

Sneha R. Krishna Kumaran, Deana C. McDonagh, and Brian P. Bailey. 2017. Increasing Quality and Involvement in Online Peer Feedback Exchange. Proceedings of the ACM Human-Computer Interaction. 1, 1, Article 63, to appear. Acceptance Rate: 28%

Motahhare Eslami, **Sneha R. Krishna Kumaran**, Christian Sandvig, and Karrie Karahalios. 2018. Communicating Algorithmic Process in Online Behavioral Advertising. Proceedings of the ACM Conference on Human Factors in Computing Systems, 2018, to appear.