MELISSA BICA

University of Colorado Boulder

Department of Computer Science • 430 UCB • University of Colorado • Boulder, CO 80309-0430

Research interests: human-centered computing, social computing, crisis informatics

2014 – present

EDUCATION

University of Colorado Boulder

Ph.D., Computer Science, second year student Advisor: Leysia Palen

Santa Clara University B.S., Computer Science and Engineering Graduated cum laude	2010 – 2014
University of Edinburgh Study abroad, School of Informatics	September – December 2012
AWARDS	
Open Science Data Cloud PIRE Fellowship Open Science Data Cloud	April 2015
Graduate Student Research Community Development Award CU Boulder Department of Computer Science	October 2014
Dean's Fellowship CU Boulder Department of Computer Science	AY 2014 – 2015
Dean's List Santa Clara University	AY 2013 – 2014
Senior Design Presentation Session Award Santa Clara University	May 2014
IEEE Women in Engineering International Leadership Conference Scholarship IEEE Santa Clara Valley Section	April 2014
Upsilon Pi Epsilon Computing and Information Honor Society Santa Clara University	April 2014
Willem P. Roelandts and Maria Constantino-Roelandts Grant Center for Science, Technology, and Society	November 2013
Tau Beta Pi Engineering Honor Society Santa Clara University	October 2013
Grace Hopper Celebration of Women in Computing Scholarship NSF	July 2013
Global Social Benefit Fellowship Santa Clara University	February 2013
Cisco-SCU Engineering Fellowship Santa Clara University	May 2012
Richard Tapia Celebration of Diversity in Computing Scholarship ACM	April 2011

TEACHING EXPERIENCE

University of Colorado Boulder

Guest Lecturer for CSCI 4830: HCC Big Data Computing.

October 19, 2015

Teaching Assistant for CSCI 1300: Introduction to Programming.

August 2014 - May 2015

OTHER EXPERIENCE

University of Colorado Boulder

August 2015 – present

Research Assistant to Leysia Palen

 Investigating how images diffuse through social media during disaster using visualization and analysis techniques.

National Institute of Advanced Industrial Science and Technology

June - July 2015

OSDC PIRE Fellow

 Implemented an interactive data visualization interface in JavaScript, HTML, and CSS, called RendezView, for structuring geo-referenced social media data.

Center for Science, Technology, & Society (Santa Clara University)

February - December 2013

Global Social Benefit Fellow

- Conducted research for social enterprises Anudip and iMerit as part of this 9 month, academic action research fellowship including 7 weeks of field work in Kolkata, India.
- Developed curriculum and instructed women in HTML and CSS in a semi-rural iMerit center in Metiabruz.

Qualcomm Incorporated

June - August 2012

Interim Engineering Intern

- Developed automated Android system and graphics performance benchmark tests in Perl and Java.
- Improved efficiency by reducing time needed to perform tests and analyze results.

PUBLICATIONS

Kim, K-S., Bica, M., Kojima, I., and Ogawa, H. (2015). "RendezView: Look at Meanings of an Encounter Region over Local Social Flocks." ACM SIGSPATIAL International Workshop on GeoStreaming.

PROFESSIONAL PRESENTATIONS

Bica, M. and Kim, K-S. (2015). "RendezView: An Interactive Visual Mining Tool for Discerning Flock Relationships in Social Media Data." Poster. To be presented at International Conference for High Performance Computing, Networking, Storage and Analysis.

PROJECTS

Text to Learn (Senior Design Project)

September 2013 – June 2014

- Digital training tool developed for social enterprises in emerging markets—uses a web-based dashboard for trainers to send training materials via SMS to trainees' mobile phones.
- Won Best in Session at SCU's annual Senior Engineering Design Conference.
- Thesis: https://scholarcommons.scu.edu/handle/11123/616

Bridging the Information Gap

April – June 2013

- Collaborated with a team of 11 students to develop a mobile application for Community Technology Alliance to aid homeless people in finding local food, shelter, jobs, and health services.
- Designed user interface using HTML and CSS to be compatible with feature phones.

PROFESSIONAL SOCIETIES

ACM, ACM-W, ACM Special Interest Group Computer-Human Interaction (SIGCHI)