# **MELISSA BICA**

# University of Colorado Boulder

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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

Research interests. Harnan centered compating, social compating, ci	isis informatics
Santa Clara University  B.S., Computer Science and Engineering	2010 – 2014
<ul> <li>Graduated cum laude (GPA: 3.67)</li> <li>University of Edinburgh</li> <li>Study abroad, School of Informatics</li> </ul>	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
<b>Dean's Fellowship</b> CU Boulder Department of Computer Science	AY 2014 – 2015
<b>Dean's List</b> 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
<b>Upsilon Pi Epsilon Computing and Information Honor Society</b> Santa Clara University	April 2014
Willem P. Roelandts and Maria Constantino-Roelandts Grant Center for Science, Technology, and Society	November 2013
<b>Tau Beta Pi Engineering Honor Society</b> 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

#### PROFESSIONAL EXPERIENCE

#### University of Colorado Boulder

August 2015 – present

Research Assistant to Professor 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, called RendezView, for structuring georeferenced social media data.
- Coded primarily in JavaScript, also HTML and CSS.

#### University of Colorado Boulder

August 2014 – May 2015

Teaching Assistant

- Taught two recitation sections and creating assignments for CSCI 1300: Introduction to Programming in Python and C++.
- Conducted weekly grading interviews with about 50 students for programming assignments.

### 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, Austin, TX.

#### **PROJECTS**

#### Text to Learn – Senior Design Project

AY 2013 - 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 eleven students to develop a mobile application for Community
  Technology Alliance to aid homeless people in finding local services, including 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)