

Education

- May 2018
(expected) **PhD Technology, Media, and Society**
ATLAS Institute – University of Colorado Boulder
- May 2014 **M.S. Computer Science**
College of Engineering and Applied Sciences – University of Colorado Boulder
Emphasis in Human-Centered Computing
- May 2012 **B.S. Computer Science**
College of Engineering and Applied Sciences – University of Colorado Boulder
Emphasis in Human-Centered Computing
Minor in Technology, Arts & Media

Research Support

- 2015-2016 **Chancellor’s Graduate Award for Excellence in STEM Education**
Computer Science is “Hard”: Uncovering Cultural Identities Within Introductory Computing Courses
This study investigated how cultural norms permeate introductory computing courses and recognize how students adopt or reject these identities in their academic careers
- 2013-2015 **National Science Foundation: Graduate Research GK12 Fellow**
The ECSITE Project: Engaging Computer Science in Traditional Education
Graduate Research Fellowship Award Number: 0841423
This project incorporated computing into existing K-12 courses by working with local school districts to develop standard-based curriculum appropriate for each individual school

Research Projects

- 2015-2016 **T9Hacks**
Founder, Lead Coordinator
T9Hacks is a women’s hackathon promoting gender diversity in creative technology. The hackathon creates opportunity for women to explore new technologies, solve real world problems, and create something amazing with a team
- Spring 2016 **BlockyTalky**
Data Manager
BlockyTalky is a project lead by Ben Shapiro in the Laboratory for Playful Computation. It enables students to make creative projects and program networked devices using the BlockyTalky system which includes Scratch and Raspberry Pi’s

Teaching Experience

Instructor

- Spring 2016
Fall 2016 **ATLS 2519: Special Topics in TAM: Code**
Introduces students to fundamental programming concepts and methodologies and apply them to creative projects. Students will learn to use code as a creative and artistic tool, and to utilize programming to find, define and solve problems in innovative ways.
- Summer 2015 **CSCI 2270: Data Structures**
Studies data abstractions (e.g., stacks, queues, lists, trees) and their representation techniques (e.g., linking, arrays). Introduces concepts used in algorithm design and analysis including criteria for selecting data structures to fit their applications.
- Spring 2015 **ATLS 3020: Digital Media 2**
A continuation of Digital Media 1 (ATLS 3010), this course introduces students to advanced digital media development including interactive programming, scripting, and database functionality. Emphasizes a historical and conceptual understanding of programming and computational theories.

Teaching Assistant

- Fall 2016 **COEN 1500: Introduction to Engineering**
Provides an introduction to the engineering profession, including an examination of current discipline specializations and a focus on career paths for those trained in engineering. Provides sufficient knowledge of the engineering disciplines necessary to make an informed major choice.
- Spring 2016 **CSCI 4830: Special Topics: Computer Science Education**
The computer science department is offering a 1-credit hour special topics course this semester on computer science education. If you are interested in teaching computer science or becoming involved in the computer science department as an undergraduate learning assistant (CA, PLA, or TA) this is the class for you. In this course, we will cover presentation techniques, how to lead a discussion session, assessment, dealing with difficult colleagues, and teaching styles. The class will be taught primarily through discussion and all students will have the opportunity to present and receive feedback in a friendly environment.
- Fall 2014 **ATLS 1220: Introduction to Computer Science**
Introduces the fundamental principles of computer science using an online virtual world called Second Life as the "Laboratory" for the course. Students will learn how to program by creating objects of interest in Second Life. In-class and in-world discussions and readings will introduce the student to important ideas and concepts that shape the field of computer science.
- Spring 2014 **ATLS 2000: The Meaning of Information Technology**
Surveys the history of information technologies and modern techniques of information production, storage, transmission, and retrieval. Emphasizes understanding not only the technological transformations in interpersonal, organizational, and mass communication, but also the technological, social and political changes that underlie the movement toward a digital society.

Workshops

- Summer 2015 **Summer SuperSTEM**
 Summer SuperSTEM is a summer program hosted by the Innovation Center, a maker space for the students in St. Vrain Valley School District.
Summer SuperSTEM: 3-D Printing Toy Design (intermediate level/grades 3-5) Learn about the craft of toy design and manufacturing through 3-D printing. You'll learn how to make 3-D designs in print and with Google Sketch-up, then print original toy designs on a 3-D printer. What you design and make is limited only by your imagination!
Summer SuperSTEM: Python Level 1 (high school level) Learn the basics of Python, a common and accessible programming language. If you are new to programming, this is a great class for you.
- Summer 2014 **ATLAS-Campos EPC Summer STEM Program (formerly Digital CUrrents)**
 The ATLAS-Campos EPC Summer STEM Program is a three-week technology intensive summer workshop for high school students who are largely from underrepresented minority groups. Students learn to use software applications and gain programming skills to create and manipulate digital content and complete a final project that showcases their creative and technical talents. Workshop participants also visit with guest speakers about career opportunities in technology-related fields and enjoy field trips to local technology-focused businesses.
- Summer 2015 **Science Discovery Summer Camp**
 Summer 2014
 Summer 2013
 CU Science Discovery offers a variety of hands-on STEM (science, technology, engineering and math) camps for kids ages 5-18. Science Discovery offers intensive 1-3 week summer for high school students. Workshops provide unique opportunities for older students to work in CU laboratories, interact with CU scientists, and explore STEM careers.

Publications

- Aug 2016 **ICER '16 – Full Paper**
 Behnke, K. A., Kos, B. A., Bennett, J. K. 2016. Computer Science Principles: Impacting Student Motivation & Learning Within and Beyond the Classroom. ICER '16: Proceedings of the twelfth annual International Conference on International Computing Education Research, (Melbourne, AUS, 2016), 171-180.
- Mar 2015 **SIGCSE '15 – Work-In-Progress**
 Kos, B. A., Sims, E. 2015. STEM Careers Infographic Project (SCIP): Teaching Media-Based Computational Thinking Practices. SIGCSE '15: Proceedings of the 45th SIGCSE technical symposium on Computer Science Education, (Kansas City, MO, USA, 2015), 681.
- Oct 2014 **RMCWiC '14 – Full Paper**
 Kos, B. A., Sims, E. 2014. Infographics: The New 5-Paragraph Essay. 2014 Rocky Mountain Celebration of Women in Computing, (Laramie, WY, USA, 2014).

Presentations

- Sep 2015 **7th Annual Symposium on STEM Education – Work-In-Progress**
Computer Science is Hard: Looking at the Gender Gap Between Two Computing Programs
- Aug 2015 **ICER '15 – Lightning Talk and Poster – Work-In-Progress**
Computer Science is Hard: Looking at the Gender Gap Between Two Computing Programs

- April 2015 ATLAS Expo – Work-In-Progress
Building Culture Within Introductory Programming
- Sep 2014 6th Annual Symposium on STEM Education – Work-In-Progress
STEM Careers Infographic Project (SCIP)

Professional Activities

- Jun 2016 Hackcon: The official hackathon organizers’ conference
Estes Park, CO, USA
- Aug 2015 ACM International Computing Education Research (ICER) Conference
Omaha, Nebraska, USA
- Mar 2015 ACM Special Interest Group on Computer Science Education Conference (SIGCSE)
Kansas City, Missouri, USA
- Oct 2014 Rocky Mountain Celebration of Women in Computing Conference (RMCWiC)
Laramie, Wyoming, USA
- Oct 2013 Grace Hopper Celebration of Women in Computing Conference
Minneapolis, Minnesota, USA
- Mar 2013 ACM Special Interest Group on Computer Science Education Conference (SIGCSE)
Denver, Colorado, USA
- Oct 2011 Colorado Celebration of Women in Computing (CCWIC) (renamed to RMCWiC)
Denver, Colorado, USA

Volunteer Work

- 2013-2015 Earth Explorers
Board Member, Evaluation Lead, Senior Volunteer, Mentor
 Earth Explorers is an independent nonprofit that partners with local schools and research institutions to provide Science, Technology, Engineering and Math (STEM) curriculum with education in film-making to spark a lifelong interest in STEM topics.

Work Experience

- Jun 12 - Jun 13 ZOLL Medical
User Experience Developer
 ZOLL is a medical company that offers EMS agencies and medical companies software solutions. I worked on the UI of ZOLL Online, maintaining current products, and helping design and integrate new products into the website. I was able to lead a few projects and learn about the design cycle in a real-world setting.

- Oct 10 - Jun 12 College of Arts & Sciences IT (ASIT)
Web Application Developer
ASIT is the in-house IT department University of Colorado's College of Arts & Sciences utilizes to build web applications. I was primarily responsible for the design and implementation of the Orientation checklist, seen by all freshmen and first-year students enrolled at CU. I also helped with implementing usability changes to the Adviser Portal and the Graduation Module, used by all advisers in the college.
- Sep 10 - Jan 11 JILA
Web Developer
Transferred and updated the JILA website.