Samantha L. Molnar

365 30th St. Boulder, CO 80305
Samantha.Molnar@colorado.edu

RESEARCH INTERESTS

I am interested in studying analytical techniques to understand networked time-series data. In particular, I study how information theory can be used to quantify uncertainty in power systems with renewable generation.

EDUCATION

PhD Student, Computer Science
University of Colorado Boulder, Boulder, CO, expected May 2020

Bachelor of Science, Physics
University of Denver, Denver, CO, 2015

HONORS

University of Colorado Boulder 2015-Present

- Best Teaching Assistant

University of Denver 2013-2015

- Chancellors Scholarship, David and Betty Hess Scholar, Gladys Johnson Scholar, Edgar Everhart Endowment, Theresa James Scholarship

EXPERIENCE

Consultant - NCWiT EngageCSEdu Summer 2016

- Performed quality assurance on resources based on my background in teaching and Computer Science.
- Helped outline future goals and practices for site resources.

Graduate Instructor - University of Colorado Boulder Summer 2016

- Taught Introduction to Data Structures.
- Planned lessons, assignments, and recitations.
- Managed teaching assistants.

Lead Teaching Assistant - University of Colorado Boulder 2016-2017

- Consulted on best teaching practices in the Computer Science classroom.
- Managed orientation of over 30 new TA's, many of which were international students with little teaching experience.
- Organized Engineering college and Computer Science department orientation for incoming teaching assistants.
- Completed the Graduate Teacher Program Spring Intensive teaching workshops.

Teaching Assistant - University of Colorado Boulder Fall 2015 - Spring 2016

- Received departmental award for Outstanding Teaching Assistant.
- Taught recitations and guest lectures for Introduction to Computing and Discrete Structures.
- Developed materials for lectures and recitations.
- Created solutions for programming and written assignments.

Teaching Assistant - University of Denver 2014-2015

- Answered students physics-related questions.

- Clarified concepts for University and Modern Physics courses.

Research Assistant - University of Denver 2014 - 2015

- Built a magneto-optic kerr effect (MOKE) setup.
- Utilized MOKE to perform experiments and record measurements to study magnetic materials.
- Developed LabView code to run and collect data for laser experiment.
- Wrote successful funding proposal for Partners in Scholarship research grant through University of Denver to build MOKE setup.

Research Assistant - University of Colorado Boulder Summer 2014

- Developed Mathematica code to simulate two-dimensional double layers in plasmas.
- Compiled findings as well as wrote and presented paper for Research Experience for Undergrads community at end of program.

Research Assistant - University of Denver 2012 - 2014

- Developed and utilized Fortran computer code to simulate gas uptake and transport inside a nanopore.
- Presented research findings at American Physical Society meeting in Denver, CO in March 2014.
- Presented a poster at Colorado School of Mines Undergraduate Women in Physics Conference in Golden, CO in January 2014.

COMMUNITY SERVICE

University of Colorado Boulder Computer Science Recruitment February 2016

- Helped plan and carry out the Computer Science PhD recruitment weekend, with a particular focus on female applicants.

Society of Physics Students Outreach Chair - University of Denver 2014 - 2015

- Developed, implemented, and evaluated volunteer events to spread love of science to Colorado youth and throughout Denver community.

Volunteer at Summer Link to College - University of Denver Summer 2013

- Participated in teaching a weeklong summer workshop on The Physics of Renewable Energy" as part of University of Denvers program "Summer Link to College, which encourages high school students from socio- economically disadvantaged groups to finish high school and pursue higher education.