

Catherine P. Sullivan

cp02sull@siena.edu • (860) 402-4146 • <https://www.linkedin.com/in/catherinesullivan314>

EDUCATION

Siena College, Loudonville, NY

Anticipated Graduation in May 2017

Bachelor of Science in **Computer Science**, Bachelor of Science in **Mathematics**

GPA: 4.0/4.0

WORK EXPERIENCE

Project Manager/Researcher, Ant Financial / IPAM, Hong Kong, China

Summer 2016

- Directed and led a team of 3 researchers through an industrial project by creating goals and organizing subtasks
- Assessed individual strengths of the team members and delegated tasks accordingly
- Developed a deep machine learning ensemble approach for detecting modified images
- Research in image forensics, statistics, and machine learning to detect image alteration
- Worked to keep the project on track in accordance to the work statement delivered to the industry sponsor at Ant Financial
- Communicated progress to industry sponsor at Ant Financial through both written and oral reports and weekly meetings
- Presented work at the University of Macau and Hong Kong University of Science and Technology

Researcher, University of Hawaii, Hilo, HI

Summer 2015

- Developed a time-saving algorithm that brought down computation time from 1 week to 15 minutes in R
- Research in computational algebraic geometry, graph theory, group theory, statistics, and biology
- Completed accelerated graduate level course in computational algebraic geometry
- Presented in colloquiums at University of Hawaii at Hilo and Siena College
- Presented at the Joint Mathematics Meetings in Seattle, WA in January 2016
- Presented at the Nebraska Conference for Undergraduate Women in Mathematics in January 2016

TECHNICAL SKILLS

- *Proficiency in:* Java, Python, C, HTML, CSS, PHP, LaTeX, JavaScript/JQuery, MySQL
- *Familiar with:* R, Sage, AJAX, JSON, Microsoft, Linux, and UNIX Operating Systems, C++, Matlab

CAMPUS AND COMMUNITY ACTIVITY

Math Club

2009-Present

- President of Math Club at Siena College
- Learn different methods for solving advanced math problems
- Organize and manage club activities and meetings
- Provided tutoring to calculus students regarding specific course work tied to students' classes (Calculus I, II, III)
- Trained for disabled students and how to effectively tutor

Computer Science Club & Coding Competition Team

2015-Present

- Placed 1st at Siena's Local Programming Competition, January 2016
- Volunteer at IMPACT Program for educating high school students about computer science
- Participated in Northeast Regional Preliminary Competition of the 2014-2015 AMC ICPC
- Participated in the 2016 Consortium for Computing Sciences in Colleges Northeast Programming Contest
- Member of Women in Computing Club, Siena College

Habitat for Humanity

September 2014-Present

- Help build houses in the Albany, NY area to provide people with affordable housing
- Participated in two weeklong service trips to Marion, SC during February 2015 and Charlotte, NC in February 2016

Other Club Activities

- Member, Siena College Pep Band, Fall 2014-Present
- Volunteer, Jamaica Service Trip, January 2015
- President, Faith Pillar of Cura Personalis, University of Scranton, Scranton, PA, Fall 2013-Spring 2014