

Emilie Menard Barnard

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COMPUTER SCIENCE EDUCATOR

Education

M.S. in Computer Science

Santa Barbara, California

UNIVERSITY OF CALIFORNIA, SANTA BARBARA
COLLEGE OF ENGINEERING

June 2016
4.0 GPA

B.S. in Computer Science

with Honors Program Designation

UNIVERSITY OF CALIFORNIA, SANTA BARBARA
COLLEGE OF ENGINEERING

June 2013

B.A. in Mathematics

with Honors

UNIVERSITY OF CALIFORNIA, SANTA BARBARA
COLLEGE OF LETTERS & SCIENCE

June 2013

Experience

Instructor

Sunnyvale, California

GIRLS WHO CODE

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

June 2017 - July 2017

- This summer, I will be an instructor for the GWC Summer Immersion Program. Responsibilities include:
 - Leading instruction and maintaining an engaging and accessible classroom environment for a diverse group of 20 high school girls
 - Managing and assessing students' progress in and proficiency of hard and soft computer science skills
 - Managing Teaching Assistantss

Lecturer in Computer Science

Santa Barbara, California

COMPUTER SCIENCE DEPARTMENT

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

June 2016 - Aug. 2016

- Taught two lectures of UCSB's undergraduate introductory computer science course during summer sessions
This included:
 - Preparing and hosting lectures
 - Organizing Teaching Assistants
 - Writing and providing oversight in grading all assignments and exams
 - Hosting office hours

Lead Teaching Assistant for *Introduction to Computer Science Course*

Santa Barbara, California

COMPUTER SCIENCE DEPARTMENT

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Oct. 2014 - June 2016

- Assisted various professors in teaching UCSB's undergraduate introductory computer science course
- Led weekly programming labs
- Hosted twice-weekly office hours
- Organized responsibilities of other teaching assistants of the course
- Prepared and hosted lectures on occasion

Computer Science and Mathematics Instructor

Santa Barbara, California

CAMPUS LEARNING ASSISTANCE SERVICES (CLAS)

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Sept. 2013 - June 2014

- Organized and taught twice-weekly tutorial groups for students enrolled in *Calculus for Social & Life Sciences*
- Privately tutored students in mathematics and computer science courses

Reader

Santa Barbara, California

MATHEMATICS DEPARTMENT

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Sept. 2012 - June 2013

- Graded biweekly homework assignments for *Non-Euclidean Geometry* and discrete mathematics courses

Organizations

Undergraduate Curriculum Committee Member

Santa Barbara, CA

COMPUTER SCIENCE DEPARTMENT
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Oct. 2014 - June 2016

- Met bi-weekly with faculty and staff members of the committee
- Monitored and proposed changes to the undergraduate curriculum
- Developed policies for ensuring a healthy level of undergraduate enrollment in the department

Graduate Student Cabinet Member

Santa Barbara, CA

COMPUTER SCIENCE DEPARTMENT
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Oct. 2015 - June 2016

- Nominated by faculty to represent graduate students in the department
- Met montly with the chair and other student cabinet members to discuss departmental changes

Honors, Awards, & Nominations

Distinguished Teaching Assistant

Santa Barbara, California

COMPUTER SCIENCE DEPARTMENT
UNIVERSITY OF CALIFORNIA, SANTA BARBARA

June 2015

Received for my work during the 2014-2015 school year. The purpose of the award is to “recognize those teaching assistants who went above and beyond to support our students and faculty” and “demonstrated this excellence again and again.”

Graduate Student Association Excellence in Teaching Award (Nominee)

Santa Barbara, California

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

2015, 2016

This campus-wide award recognizes the dedication of graduate students who have shown excellence and have gone above and beyond in their roles as teachers.

Women in Science and Technology Award Winner

Nationwide

VISIONARY INTEGRATION PROFESSIONALS

July 2012

The nationwide competition supports women seeking a career in computer science, information technology, or other applicable fields.

South Coast Business & Technology Award Winner

Santa Barbara, CA

SOUTH COAST BUSINESS & TECHNOLOGY

2009, 2010, 2011, 2012

This award honors top individuals, organizations and companies who have contributed to helping the south coast of Santa Barbara County remain economically vibrant.

Projects

Cellular Automata Encryption Generator

[HTTP://WWW.EMILIEBARNARD.COM/PROJECTS/CA.HTML](http://www.emiliebarnard.com/projects/ca.html)

This cellular automata encryption generator allows users to learn about CA encryption techniques in a visual manner. It allows the user to input any CA rule (mod 256) and set output preferences.

Awesome Library

[WWW.PCONRAD.GITHUB.IO/AWESOMEPRELIMS/](http://www.pconrad.github.io/awesomeprelims/)

The idea of this discrete math library is to allow students to self-study various problems related to discrete math, such as set operations and relation classification. I created a 64-bit JavaScript number library which was used to automate question generation.