Emilie Menard Barnard

Computer Science Educator in Seattle, WA

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Education

M.S. in Computer Science

Santa Barbara, California

University of California, Santa Barbara
College of Engineering

June 2016
4.0 GPA

- Languages used: Java, Python

B.S. in Computer Science

with Honors Program Designation

University of California, Santa Barbara
College of Engineering

June 2013

- Languages used: Python, C, C++, Assembly, Java, Matlab, HTML, CSS, JavaScript

B.A. in Mathematics

with Honors

- *Languages used: Mathematica*

University of California, Santa Barbara
College of Letters & Science

June 2013

Experience

Adjunct Professor

Seattle, Washington

North Seattle College Computer Science Department
Seattle Colleges

Sept 2018 - Present

- Organize and teach introductory computer science courses
  - Prepare and host class and lab meetings
  - Foster a learning environment that respects the diverse student population
  - Create curriculum (including but not limited to: in-class activities, homework quizzes, interactive lab assignments, programming assignments, and exams) that meets district-wide course and regional transfer requirements and encourages active participation
  - Assess students' academic performance
  - Host office hours
- Work effectively with students, colleagues, and staff in a campus climate that promotes cultural diversity and multicultural understanding in an urban environment
- Languages I am currently teaching: Python

Adjunct Professor

Los Altos Hills, California

Foothill Computer Science Department
Foothill De-Anza Community College District

Aug 2017 - June 2018

- Organized and taught introductory computer science courses
  - Prepared and hosted class meetings
  - Fostered a learning environment that respects the diverse student population
  - Created curriculum (including but not limited to: in-class activities, homework quizzes, programming assignments, and exams) that met district-wide course requirements and encouraged active participation
  - Assessed students' academic performance
  - Hosted office hours
- Participated in mentorship activities
- Languages taught: Python

Instructor

Sunnyvale, California

Girls Who Code

May 2017 - Aug 2017

- Led the GWC summer program classroom at Amazon Lab126
  - Led instruction and maintained an engaging and accessible classroom environment for a diverse group of 20 high school girls
  - Adjusted existing curriculum (including but not limited to: in-class activities and projects) to reflect the interests of my students
  - Created curriculum (including but not limited to: in-class activities and projects) for application-based topics
  - Managed and assessed students' progress in and proficiency of hard and soft computer science skills
  - Managed Teaching Assistants
- Languages taught: Scratch, HTML, CSS, JavaScript, Python

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
  - Created curriculum (including but not limited to: lectures, lab assignments, programming assignments, and exams) that met UC-wide standards
  - Managed Teaching Assistants
  - Hosted office hours
- Languages taught: Python

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
  - Improved existing lab curriculum
  - Hosted office hours
  - Managed other Teaching Assistants
  - Designed and hosted lectures on occasion
- Participated in mentorship activities
- Languages taught: Python

Computer Science and Mathematics Instructor

Santa Barbara, California

Campus Learning Assistance Services (CLAS)
University of California, Santa Barbara

Sept 2013 - June 2014

- Led tutorial groups for students enrolled in *Calculus for Social & Life Sciences*
- Designed curriculum for tutorial groups that complemented lecture
- 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
Univerisity 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
Univerisity 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

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.

Projects

Cellular Automata Encryption Generator

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/

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.