

# Emily Pedersen

I'm a software engineer interested in HCI, UI design, & entrepreneurship.

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## Education

UC Berkeley Fall '18 - Spring '19  
Candidate for M.S. in Computer Science with an emphasis in HCI

Stanford University Summer '18  
Technology & Innovation certificate

UC Berkeley Fall '14 - Spring '18  
B.A. in Computer Science  
B.A. in Cognitive Science  
Technology & Entrepreneurship & Human-Centered Design certificates (HCD presentation on [YouTube](#))  
Dean's Honors list Fall '14

## Coursework

### Graduate courses:

Theory & Application of Virtual Reality  
Research Topics in HCI

### Undergraduate courses:

UI Design & Development  
Product Management  
Technology Entrepreneurship  
Software Engineering  
Efficient Algorithms  
Artificial Intelligence

## Skills

### Programming

Python : Java : C : C#

### Web Development

JavaScript/D3/jQuery/Node.js/React :  
HTML : CSS

## Industry Experience

### Mozilla

Summer 2017

#### Software Engineering Intern

- Developed web automation scripts for the Normandy Control Shield UI to aid continuous integration as part of the process improvement initiative.

### Microsoft

Summer 2016

#### Explorer Software Engineering and Program Manager Intern

- [SWE] Designed & developed the "Footprint Manager" website, allowing MS partnered Wi-Fi providers to upload CSV files of hotspot data (a footprint).
- [PM] Led & coordinated Footprint Manager design & development phases.

## Research Experience

### Professor Marti Hearst Lab @ UC Berkeley

Spring 2017 - Present

#### Research Assistant

- Redesign the 'word cloud' into a 'word zone'. 'Word zones' categorize topics into spatial groups and use whitespace to distinguish between categories.
- Create experiment and conduct user studies to evaluate our design.

## Teaching Experience

### UI Design & Development @ UC Berkeley

Fall 2017 - Present

#### Head Graduate Student Instructor

Fall 2018 - Present

#### Undergraduate Student Instructor

Fall 2017 - Spring 2018

- Lead a weekly discussion section of 30-40 students.
- Hold office hours, and grade students' projects and exams.

### Data Structures @ UC Berkeley

Fall 2016 - Spring 2017

#### Undergraduate Student Tutor

- Led a weekly discussion section of 10 students.
- Assisted during office hours, and graded students' projects and exams.

## Projects

### Software Engineering - SaaS App

Ruby & HTML/CSS

- Using the Agile development cycle, built a user-friendly educational application for a UC Berkeley Optometry Professor and his students.
- Won 'Most Technically Challenging' award by Google & Facebook judges.

### UI Design - Android & Alexa Skill App

Java & JavaScript

- Designed and implemented an Android and Alexa skill application, named 'Acting Bud', aimed to help actors practice their lines for a play.

### Computer Security - Secure File Sharing

Python

- Implemented a scheme to securely store files on a malicious server & used merkle trees to efficiently store data on the server.
- Used symmetric & asymmetric encryption, and MAC cryptographic tools