

Emily Margis

EDUCATION

UC Berkeley, Berkeley CA — B.A. *Computer Science* (GPA: 3.62)

August 2017 - May 2021

EXPERIENCE/ACTIVITIES

Prototype Industries Inc., Mission Viejo — *User Experience Consultant Intern*

June 2019 - August 2019

- Redesigned main customer interface for sending document requests, increasing efficiency/organization and reducing confusion among external users.
- Worked closely with writers, managers, and developers to identify usability issues with the company's patented technical publishing software, Skywriter, and proposed solutions to make it more user friendly and intuitive for internal and external users.
- Through a series of user interviews as well as usability analysis, I defined user pain points and goals, created workflows and wireframes, then iterated and improved these designs, creating a final prototype to hand off to developers.

Society of Women Engineers, Berkeley — Professional Development Committee *Corporate Relations*

September 2018 - December 2018

- Reached out to Corporate representatives of companies such as Google, GM, and Spotify to organize events with SWE as part of our professional development series, aimed at giving female engineering students the professional career tools they need.
- Organized and executed SWE's annual overnight host program, giving Berkeley's female engineering admits information and support in how to succeed in a male-majority industry.

PROJECTS

UberEats Feature Prototype — March 2019

- Prototyped a new UberEats feature that allows drivers to restrict their work boundaries
- Utilizes hotspot maps to increase efficiency and eliminate unnecessarily far drives
- Interviewed UberEats drivers, created personas and identified pain points, conducted usability tests, and iterated upon figma prototype.

Map Application — April 2018

- Implemented the backend of a navigation program that converts routing and location data in XML into a pixel-by-pixel image.
- Created a user interface that supports scrolling, zooming, and route finding.
- Utilizing a graph data structure, I implemented the A* shortest paths finder that relies upon heuristics to improve runtime for route finding.

2D Tile Based Game — February 2018

- Developed a 2-player game by constructing a pseudorandom world generator as well as implementing game mechanics to allow players to navigate through rooms and tunnels, racing to collect items and blocking each other.

Performance Programming — April 2019

- Sped up a provided convolutional neural network by 14 times by implementing performance optimization techniques such as vector-extension instructions (SIMD), and loop unrolling, as well as thread level parallelism using OpenMP.

CONTACT INFO

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SKILLS

Programming

Java, Python, C, RISC-V, Jupyter, iPython, Numpy, Git, Logism, Latex, Ruby/Rails(fa-19)

Design/Research

Figma, Wireframes & mock ups, User Interviews, Usability Testing, User Flows, Personas, Storyboards, Competitive Analysis

RELEVANT COURSEWORK

Algorithms - (fa19)

Data Structures & Programming Methodology

Data Science Principles and Techniques

User Experience Design

Discrete Mathematics & Probability Theory

Computer Architecture and Machine Structures

Artificial Intelligence - (fa19)