

CATHERINE ZHENG

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EDUCATION

University of Michigan

B.S. Computer Science

Ann Arbor, MI
Fall 2018 - Winter 2022

- EECS 491: Intro to Distributed Systems (Golang)
- EECS 482: Intro to Operating Systems (C++)
- EECS 489: Computer Networks (C++)
- EECS 494: Game Design and Development

London School of Economics

Summer Study Abroad, 6-8 credit hours

London, U.K.
Summer 2019

EXPERIENCE

Facebook

Software Engineer Intern

Menlo Park, CA (remote)
June 2021 — August 2021

- Drove the design and development of existing and oncoming features aimed at further improving a user's experience on the Facebook desktop website. Implemented features with **Relay** and **PHP**.
- Became proficient at catching and flagging bugs, writing integration tests critical for privacy, and writing end-to-end tests to consolidate newly developed features.

Facebook

Software Engineer Intern

Menlo Park, CA (remote)
May 2020 — August 2020

- Went through the entire process of design, development, testing, and deployment of user facing features using **React** and built an infrastructure to dynamically render them on the Facebook desktop website.
- Created the framework using **Relay** (GraphQL client for React) and **PHP**.

MIT IoT Bootcamp

Course Mentor

Bloomfield Hills, MI
May 2018 — June 2018

- Co-mentored eight groups of high school freshmen in solving real-world issues, guiding them to innovate solutions using IoT technology while learning more about different facets of computer science
- Managed the hands-on process of building IoT hardware, writing software, and the final student hackathon

PROJECTS

Paxos-based Key/Value Service for EECS 491

- Created a Paxos-based key-value service that supports concurrent Put, Get, and Append requests from the client and preserves linearizability through a Paxos-based RSM.
- Implemented the key-value store, Paxos and Paxos-based RSM in **Golang** and developed bash scripts to optimize testing.

Linux Thread Library for EECS 482

- Created a multiprocessing library for Unix systems that supports threads, mutexes, and condition variables. Implemented the library and tests in **C++**.

Music Quiz Game *JPMorgan Prize Winner at EECS 183 Project Showcase*

- Lead a team of four to develop a music quiz web app on Heroku using **Flask** framework and **Python**
- Integrated web-scraping using **Beautiful Soup**[™] HTML parser and leaderboard **Google Firebase**[™]

DNS Spoofing

- Implemented a programs to detect port scanning and ARP spoofing on a network and conduct man-in-the-middle DNS attacks. Required to self-teach **Golang**

ADDITIONAL

- Languages: **C++**, **Python**, **React**, **PHP**
- Technologies: Visual Studio Code, Git, Mercurial
- Freelance graphic designer and avid artist — check out my portfolio at catzheng.com!