# Yuxuan Zhao

Brown University, Master of Science in Computer Science

Sept. 2021 - May 2023

Harvard University, Cross Registration in Data Structure and Algorithm

Jan. 2022 - May 2022

University of Liverpool, Bachelor of Science in Information and Computing Science Sept. 2016 – July 2020

## WORK EXPERIENCE

# Fidelity Investments, Senior Software Engineer

July 2023 – Present

Trading Dashboard | New streaming experience for 51.5M customers (+3.3M YTD)

- Architect: iterated over UX designs and product requirements, architected and implemented seamless isomorphic solutions using **Angular** and **Node.js** within a 2-week Agile sprint cycle
- Test: achieved 100% code coverage with **Jest** and **Jasmine**, automated integration tests and system tests with **Selenium** and **Karate**
- Release: planned a series of Minimum Viable Products, created rollout plans, conducted A/B testing, and deployed production installs with **Jenkins** and **Planit**
- Post-release: managed feature toggles and collected metrics in LaunchDarkly, monitored Splunk dashboards for on-call support

## Option Summary | Star business that attracts new investment \$48M YTD

- Led the design and implementation of **GraphQL** schema and resolvers
- Created Schematic rules to automatically generate or modify code templates and layouts

#### **CGI**, Software Engineer Intern

June 2022 - Sept. 2022

- Utilized **React-window** for lazy loading, leveraged **Reselect** to optimize expensive function calls and compute derived data from the **Redux** store state
- Designed **RESTful APIs** with **Node.** is for HR applications and created validations on JSON forms

## Cisco Systems, Software Engineer Intern

Mar. 2021 – Aug. 2021

Webex | Enterprise-standard app serving 13M+ users for meetings, messaging, and calls

- Developed Android Webex's calling features, achieving 100% code coverage with Espresso
- Deployed a **Jenkins** pipeline in CI/CD to automate end-to-end tests, reducing testing time by 40%

SenseTime Group, Software Engineer Intern

Sept. 2020 – Mar. 2021

Lenovo Research, AI Intern

July 2019 – Aug. 2019

### Projects

#### Alfred RAG | LLM RAG for prompted weak supervision

Python

- Developed a Retrieval-Augmented Generation (RAG) system, integrating **Faiss** for efficient vector search and OpenAI's GPT models for natural language queries
- Created a custom embedding management pipeline using **PyTorch** and Faiss, optimizing vector search with IVF and IVF SQ8 index types, enabling scalable and fast document retrieval

#### Puddlestore | Distributed File System

GoLang

- Enabled distributed access to file system objects using Global Unique Identifiers, implemented replication by adding salt to ensure data redundancy and availability
- Ensured data consistency across nodes with the **Raft** consensus algorithm, establishing a fault-tolerant and synchronous update mechanism for maintaining accurate data pointers

# SKILLS

 $\textbf{Languages} \hbox{: JavaScript, TypeScript, Python, Kotlin, GoLang, SQL, HTML, CSS, GraphQL}$ 

Frameworks & Tools: AWS, Kubernetes, Docker, REST, Angular, React, Node.js, MongoDB, PyTorch

Testing: Jest, Jasmine, Selenium, Karate, Jenkins, GitHub CI/CD