Yuanjie (Jerry) Zhao

+1 604-782-0419 zhaoyuanjie96@gmail.com github.com/YuanjieZhao
linkedin.com/in/yuanjiezhao yuanjiezhao.github.io

Technical Skills

Languages: Java, JavaScript, HTML/CSS, C/C++, Typescript, Python, Racket

Other: Browser Rendering Engine, Machine Learning, Linux, Git, Agile Development, Functional Programming, Embedded System, Photoshop, LaTeX, MATLAB, Physics Modeling

Education

B.Sc., Computer Science and Physics
University of British Columbia
Graduating May 2019
Computer Science Grade: 90%
Overall Grade: 85%

Scholarships

Faculty of Science International Student Scholarship, 2018

International Major Entrance Scholarship, 2014-present

Chancellor's Scholar Award, 2014

Volunteer

Charity Show at School

As the major organizer in the student team, I was responsible for hiring volunteers, making advertisement, scheduling, and coordination. We sold 500 tickets after two-month preparation and raised ¥13,000 for post-earthquake children. All donation went to the Red Cross.

Raleigh International

Collaborated with a team of volunteers to build a hygiene system in Malaysian rural areas.

Work Experience

Front-End Developer Intern Summer 2018
Xiaomi Technology, Beijing

- Translated design team's mockups into responsive and interactive interfaces in Xiaomi Game Box App, using HTML, CSS, JavaScript and doT.js.
- Improved the conversion rate of a mobile game by 30% by trying out five different versions of the game's homepage.
- Reduced the rendering time of two ranking pages by 50% by eliminating unnecessary composting layers.
- Rewrote internal documentation system in GitBook and Markdown to reduce training cost for new team members and to encourage more readable documentation.
- Extended Xiaomi analytics engine to support event tracking for YouTube Embedded Players.
- Designed reusable UI components for all front-end teams.

Research Assistant Summers 2016 and 2017
UBC Industrial Automation Laboratory, Vancouver

- Developed a sensor network for dynamic environmental monitoring using low-cost mobile robots in collaboration with other researchers. This system is deployed in India.
- Wrote a C program on Raspberry Pi that can wirelessly control speed, movement, and data collection of the robots using laptops.
- Co-Author, "Automated Water Quality Survey and Evaluation Using an IoT Platform with Mobile Sensor Nodes," Sensors, 2017

Technical Projects (available on GitHub)

Full-stack local restaurant recommendation website

- Designed an easy-to-use UI (HTML / CSS /JavaScript)
- Constructed a web service (Java servlet, REST API) to fetch local restaurant data from Yelp API based on users' GPS locations
- Developed a content-based recommendation algorithm
- Used a MySQL server to store users' favorites and history for future recommendation.

Query engine for university courses

- In a team of two, constructed a query engine in Typescript and Node.js that can answer queries about UBC course offerings
- Asynchronously parsed UBC course data files using ES6 Promise and JSZip
- Created a web services providing REST APIs using Restify framework

Bus Finder Android App

- Used OSMDroid API to display a map and plot the user's location
- Constructed the feature to search the nearest bus stop and bus schedule
- Built a web service in Java to retrieve and parse real-time bus arrival information from TransLink Open API

Disassembler using C to reverse engineer machine code into Y86 assembly

GPS tracker using C and MSP430 microcontroller