Randy Zhu

604-704-9500 | randyzhu@student.ubc.ca | linkedin.com/in/rzhu08 | github.com/RandoNandoz

TECHNICAL SKILLS

Languages: Java, C#, Python, C/C++, HTML/CSS, TypeScript, Racket/Scheme
Frameworks: JUnit, Unity, Swing, JavaFX, Android, Flask
Developer Tools: Git, Docker, Azure, CloudFlare, Linux, Interactive Disassembler, Cisco Wireless
Libraries: Sympy, Numpy, Pandas, Matplotlib, MongoDB

EXPERIENCE

Barista/Cashier   Aug. 2021 – Aug. 2022
Waves Coffee House   *Burnaby, BC*
- Efficiently handled high customer volume, maintained sanitation, and resolved technical issues in a fast-paced cafe.

VOLUNTEER

Automation Developer   Sep. 2023 – Present
UBC Agroponics   *Vancouver, BC*
- Orchestrated the deployment of farming automation web applications using Docker, accelerating the development lifecycle and improved scalablity.
- Visualized and stored sensor data transmitted using MQTT into Postgres, ensuring efficent data storage.
- Delivering 90% cost savings by transitioning team from paid, proprietary software to free/open-source solutions.

PROJECTS

Collidy Road | *Unity, C#*   July 2023
- Lead developer for a top 10% of submissions game jam project, a role-reversal of Crossy Road
- Optimized particle FX and entity behaviour to support massive enemy count.
- Collaborated with several artists and developers over multiple days to avoid work overlap and streamline work.

Decisions Bot | *Discord API, MongoDB, Python, Docker, Git*   March 2023
- Developed a Discord bot to track applicants' admissions decisions.
- Employed MongoDB to track decisions, and user calls to the bot to provide more reliable data warehousing.
- Collaborated with end users to suggest features and feedback on the bot's behaviour.

StudyBuddy | *Firebase, Flask, OpenAI API, HTML, Python*   June 2023 – Present
- Currently working on smart scheduling and studying tracking webapp.
- Leveraged OpenAI API to solve schedule constraint problems, leading to smarter, better schedules.
- Used Flask and Firebase to rapidly facilitate OAuth2 based authentication the end user.

Plantis | *Typescript, React, Firebase, HTML*   January 2023
- Plant watering tracker/reminder app for nwHacks 2023
- Architected solution to storing plant data into Cloud Firestore, a NoSQL database solution
- Implementated authentication using Firebase

Bestiebot | *Reddit API, MongoDB, Gephi, Python*   Sept 2022
- Reddit bot used to track user interactions on forum to display user-focused data about each user's behaviour.
- Using Gephi, a software for network analysis and visualization, displayed stunning visualizations of user data.

Discord Music Bot | *Spotify API, Discord API, Lavalink, Python*   Jan 2021
- Music bot for Discord written for primarily pedagogical purposes to educate students.
- Implemented a feature allows users to translate Spotify playlists using the Spotify API into YouTube format, allowing the bot to play users' playlists.

EDUCATION

University of British Columbia   GPA: 90% (GPA: 4.33/4.33)
BSc, Computer Science   *Sep. 2023 – Present*