

HUANYU (DEXTER) BAI

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SUMMARY

Seek Internship and Co-op for 2023 in Software Engineer roles. Current MSCS student at Northeastern University. Expect to graduate in December 2023. Project experience in mobile application with Android, web development with React and etc. Have developed scalable and well-documented code for over a year.

EDUCATION

M.S. Computer Science-Align, Northeastern University-Vancouver (Jan 2022 - Current) **GPA: 3.84**

Courses: Object-Oriented Design, Data Structure, Mobile Application, Algorithm, Web Development

B.Eng. Mechanical Engineering, Laurentian University-Sudbury (Jan 2017 - May 2021) **GPA: 8.33**

Courses: Robot Manipulation, Control Systems, Dynamics, Machine Design, System Design and Simulation

SKILLS

- Programming Languages: Java, Python, C, JavaScript, HTML, CSS, SQL, Matlab
- Databases / Cloud: MySQL, Firebase (cloud-hosted database), Heroku
- Framework / Tools: Java Swing, React, Firebase Auth, GIT, Android Studio, IntelliJ IDEA, VS Code
- Good coordination skills at work including teamwork, communication and problem solving

PROJECTS

Web App (React) 9/2022 - Current

- Build an online marketplace for student job seekers and company recruiters to seek for jobs and talents. Students and recruiters can search for job posts, apply for jobs, view profiles with online resume, directly contact talents etc.
- Use HTML, CSS and JavaScript to create dynamic web pages for learning purpose and prototyping. Use the React framework to develop the final project.
- Use MySQL database, and design relational database tables to store users data and job posts data.
- Develop more than five webpages including Login, Register, Profile, Details and Search. All webpages are compatible with laptop, phone and tablet devices.

Fitness Android App (Java) 5/2022 - 8/2022

- Project Git Repo: https://github.com/dexter0918bai/Fitness_38/tree/BugFreeVersion
- This project hopes to help people build awareness in physical health and eating in moderation, and thus earn a healthier lifestyle. It keeps track of user metrics in walk steps, calories eating and calories burning.
- As the project leader, designed the Fitness App project including architecture, Java codes and choices of technical tools. Came up with the project idea, created a mind map for brainstormed features and conducted team discussions.
- Used Firebase Auth to authenticate user accounts so that new users can register an account and existing users can login. Used Firebase Realtime database (hosted on the Cloud) to store user account data and fitness metrics.
- Coded in Java with Android Studio, used Java Swing library, used Gson library for serialization, managed dependencies with Gradle. Designed, prototyped and implemented app's UI.

Autonomous Food Delivery Vehicle 9/2020 – 5/2021

- Designed an automated vehicle which is capable of delivering multiple foods from kitchen to dining room tables. This autonomous vehicle is purposed to be used to break the inflection of COVID-19.
- Analyzed the controlled sensors to prevent collisions and indicate conditions of food orders. Analyzed the capacity and working speed of different micro-controllers.
- Used the Arduino platform to design circuit diagrams and control various sensors.