MARSHALL ZHANG

marshall.zhang02@gmail.com | **Full Stack Developer** | Denver, CO 80111

EDUCATION

University of Portland   **Portland, OR**
B.S. Computer Science and Music   *Fall 2020 - Spring 2025*

Awards: Outstanding Capstone Project, Outstanding Instrumentalist, Dean's List, Presidential Scholarship, Music Scholarship
Leadership: Tennis Club president, Lion Dance head, Symphony & Chamber Orchestra First Chair
Additional Information: I took a one-year gap year (F'21–S'22) to care for my mother, who had cancer.
Contacts: https://github.com/MarshallZzzz | www.linkedin.com/in/marshall-zhang-a23002291 | https://marshallzzzz.github.io/

EXPERIENCE

Money Maker - Budgeting App   **September 2025**
Full Stack Developer   *Personal Project*

- Developed full stack budget tracking app with 12+ expense organization, budget vs transaction comparison tables, and history of monthly goals for financial management and clarity
- Architected secure REST API using Node.js (Express) with Prisma ORM + PostgreSQL that features JWT authentication, data models (user, budget, and transaction), and 4+ CRUD endpoints
- Designed responsive React/Vite UI with reusable components and hooks, real-time transaction rollups, and Docker containerized deployment

Full Stack Construction Website   **Summer 2025**
Full Stack Developer   *Mega United Corporation LTD*

- Developed responsive website for construction companies to showcase 5 + project portfolios and web development capabilities
- Architected scalable MERN stack infrastructure with MongoDB with CRUD operations
- Implemented animations featuring timeline milestone visualization, leaflet-based geolocation mapping, and dynamic project gallery

University of Portland Computer Science Department   **Spring 2023 - Fall 2024**
Teaching Assistant : Intro to CS, Data Structures, and Theory of Computation   *University of Portland CS Department*

- Collaborated with professors to manage student grades, feedback tracking, and performance metrics through Microsoft Excel and weekly meetings
- Automated homework submissions validation and compilability checks through Linux CLI, reducing grading time by ~30%
- Mentored 60+ students, provided code reviews, feedback, and guidance to strengthen understanding and proficiency

Senior Capstone - MicroMouse   **Fall 2024 - Spring 2025**
Full Stack Developer and Team Lead   *University of Portland Multidisciplinary Capstone*

- Led a 4-person team, set milestone deadlines, delegated tasks, and coordinated between developers and advisors
- Designed and built an autonomous robotic mouse capable of solving an interchangeable 10 ft x 10 ft maze using a flood fill algorithm
- Programmed embedded C firmware on STM microcontroller, calibrated sensors and PID, unit-tested both hardware and software modules, and tracked issues with LEDs and simulation
- Competed in the 2025 APEC MicroMouse competition, achieved autonomous navigation, and earned Outstanding Capstone Project

SKILLS

Languages: Java, JavaScript, C/C++, Python, Rust, R
Frameworks/Tools: React, Node.js (Express), MERN, Prisma, Docker, CI/CD
Databases: PostgreSQL, MongoDB
Other: Linux, MATLAB, STM, TailwindCSS, Godot, JWT, Onshape

Other projects: Mortal Cooking game (F'24), Speedrun game (F'24), Game-Jam Horror game (F'24), Olympic Data Analysis and Visualization (F'24), Java Compiler-MiniJava (S'24), DFA animator (F'23), Chess game (F'22)