

# MARSHALL ZHANG

marshall.zhang02@gmail.com

Software Engineer

Denver, CO 80111

## EXPERIENCE

### Mobile Expert

T-Mobile Inc, USA

December 2025 - Present

Evergreen, CO

- Consistently met sales goals including voice line activations, insurance attachment rate, accessories per phone, and visa applications
- Achieved perfect CSAT customer satisfaction through digital support, upgrade solutions, and comprehensive assessment for tailored rate plans
- Collaborated with team members to find optimal solutions for upgrades, transfers, and account support

### Teaching Assistant

University of Portland Computer Science Department

Courses: Intro to CS, Data Structures, and Theory of Computation

Spring 2023 - Fall 2024

Portland, OR

- 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

### Construction Technician and Assistant Manager

Mega United Corporation

May 2021 - May 2022

Harmon, GU

- Collaborated with project managers, analyzed project requirements and cost estimations to land government construction proposals
- Coordinated with clients for technical specifications, addressed on-site concerns, and bridged communication between field operations and business stakeholders to mitigate damages and ensure quality standards
- Executed hands-on work across multiple trades on large-scale projects, gaining comprehensive understanding of workflows, timelines, and quality standards

## PROJECTS

### StaTracker

iOS Developer

December 2025

The Good Stringer

- Developed a Swift-based scoring and analytic engine to track point-by-point data and compute performance metrics for amateur and collegiate players
- Architected a modular MVVM architecture to ensure intuitive input and secure data aggregation into exportable analytics via Swift Charts and CSV
- Implemented a comprehensive test suite to handle various match formats, scoring rules, and user error, ensuring data accuracy under edge-case conditions
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### Money Maker - Budgeting App

Full Stack Developer

September 2025

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

**Construction Website***Full Stack Developer***July 2025***Harmon, GU*

- 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

**Senior Capstone - MicroMouse***Team lead and Software Engineer***Fall 2024 - Spring 2025***Portland, OR*

- 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

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**EDUCATION****University of Portland***B.S. Computer Science and Music***Portland, OR***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://www.linkedin.com/in/marshall-zhang-a23002291) | <https://marshallzzz.github.io/>

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