Oscar Zheng

San Lorenzo, CA — oscar7zheng@gmail.com — linkedin.com/in/ozheng7 — github.com/ozheng7 — ozheng7.github.io/portfolio

Summary — CS graduate with full-stack development experience, production internship, and strong foundation in algorithms, distributed systems, and ML.

Skills

Frontend HTML5, CSS, JavaScript, Figma, React, TailwindCSS, JavaFX
Backend Node.js, Express.js, MongoDB, Firebase, RESTful APIs
Development Front-End Dev, Agile Collaboration, Iterative Design, Test-Driven Dev
Languages Python, Java, C++, C, HTML5, CSS
Tooling Bash, Docker, Make, GDB, Valgrind, Vim
Testing Pytest, Unit Testing, Integration Testing

Experience

Watering Hope **Jul 2024 – Sep 2024**
Web Development Intern

- Collaborated within a 6+ person cross-functional team to design and deliver a user-focused web application within a 2-month timeline
- Developed and integrated payment APIs that enabled 200+ successful test transactions, reducing checkout flow errors by 30%.
- Employed version control best practices with GitHub, including branch management and peer code reviews
- Used wireframing and prototyping tools to translate user needs into intuitive UI designs
- Iterated on feedback through agile communication channels, improving product quality and team coordination
- Delivered a production-ready website with scalable and maintainable code: wateringhope.org

Projects

MERN FullStack Notepad Web App **August 2025**

- Built a full-stack notepad app with the MERN stack and TailwindCSS, handling 100+ saved notes per session in testing
- Designed and deployed 5+ RESTful APIs with Express, connected to MongoDB, enabling persistent CRUD operations
- Configured environment variables and deployment settings to improve reliability, achieving 100% uptime during demos
- Github

Ember Eats Firebase Web App **August 2025**

- Built Ember Eats with Firebase Auth and Firestore, enabling 50+ users to sign in and save favorite restaurants
- Designed a responsive React + TailwindCSS UI, improving load speed by 30% across devices
- Implemented real-time data sync, allowing instant access to 200+ saved restaurants per user session
- Demo

Predictive Modeling of Video Game Sales Using Launch Attributes **Jan 2025 – Mar 2025**

- Analyzed 1,650+ video games to assess how platform, genre, and price impact post-2010 sales
- Built predictive models (linear, Lasso, Random Forest) with a best R^2 of 0.24
- Used Python (pandas, seaborn, scikit-learn) for EDA and visualizations, finding no consistent predictors of high sales
- Github

Custom 9-bit ISA Design & Processor Implementation **Jul 2024 – Aug 2024**

- Designed a 9-bit custom ISA and single-cycle datapath with 16 registers, supporting MIPS-like instructions
- Implemented and tested processor hardware and control logic in SystemVerilog using ModelSim
- Developed assembly programs for Hamming distance, arithmetic difference, and shift-add multiplication algorithms
- Github

Pantry Pal **Sept 2023 – Dec 2023**

- Built a full-stack Java app using GPT-4 and Whisper to generate recipes from text or voice input
- Designed the JavaFX UI and integrated MongoDB for user accounts and ingredient storage
- Worked in a 4-person Agile team, handling 50+ AI requests per session in local demos
- Github

Education

University of California, San Diego
Bachelor of Science in Computer Science