Daming Wang

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EDUCATION

Colorado School of Mines

M.S. in Computer Science (GPA: 3.86)   2023 - 2025

B.S. in Computer Science with a focus in Data Science (Magna Cum Laude, GPA: 3.78)   2019 - 2023

3x CMAPP Scholar with Datava, Salesforce, Pax8 | 4x Dean's List Honor | Alpha Phi Omega Fellowship Chair

SKILLS

- **Proficient Languages**: Java | Python | Rust | C | C# | JavaScript | TypeScript | Kotlin | SQL
- **Frameworks and DB**: Express | Node.js | Spring Boot | Flask | React | SQL and noSQL Databases
- **Cloud & Tools**: Azure DevOps | AWS | Git | Linux | Docker | Kubernetes | Kafka

WORK EXPERIENCE

Thorlabs, Lafayette, CO | Software Engineer Intern | 05/2025 – 08/2025 | (Rust, Python, Azure DevOps)

- Parallelized the company's device testbench to enable concurrent testing for multiple devices by leveraging Python's **multi-threading** module, cutting 75% of testing time and increasing product profit margin by 7%.
- Implemented a testbench GUI using Rust egui, with real-time communication to the Python backend via **threading** and **Unix Domain Socket** for status updates, enabling an integrated workflow for technicians.
- Conducted feasibility research on replacing C with Rust for embedded development; developed an embedded GUI and firmware using **Rust Embedded Async** and **LVGL** frameworks for the company's upcoming product.

Datava, Golden, CO | Software Engineer Intern | 05/2024 – 08/2024 | (PHP, JavaScript, PostgreSQL, AWS)

- Designed robust unit and integration test suite using **Codeception** and **PHPUnit**, achieving over 80% test coverage for five modules' API endpoints, encompassing 10,000+ lines of business-critical logic.
- Steered a team of 3 engineers and automated data validation processes for API requests, accelerating validation tasks by 50%; Constructed **SQL** scripts to store and audit the API responses.
- Spearheaded **Git** version management for a multi-developer team, resolving 30+ complex merge conflicts.

Pax8, Greenwood Village, CO | Junior Software Engineer | 05/2022 – 12/2023 | (Docker, Kubernetes, AWS)

- Engineered a real-time event-driven data transmission pipeline utilizing **Kafka** for gathering client action data, enabling data acquisition for the Data Engineering team's ETL workflow.
- Migrated 4 monolithic applications to **Spring Boot** microservices; configured a **Sumo Logic** dashboard to monitor and alert on any remaining traffic in the monolith services.
- Automated customer billing workflows by designing and deploying a **Cron-based** microservice for scheduled credit memo delivery, reducing manual overhead by 4 hours/week.

Payne Institute, Golden, CO | Application Developer | 08/2021 – 05/2022 | (HTML, JavaScript, Google Cloud)

- Constructed an interactive Gas Flare mapping web application using **HTML, JavaScript,** and **ArcGIS API**, enabling users to visualize and analyze gas flaring data by querying desired features.
- Hosted and managed the application on **Google Cloud** Compute Engine with **Apache** web server.

BurstIQ, Denver, CO | Software Engineer Field Session | 08/2021 – 12/2021 | (Express.js, React, TypeScript)

- Designed and developed a **React** frontend for a blockchain-based web application for medication donation.
- Redesigned the data models and data ownership; connected the frontend to the **Express** backend through **REST API** calls, enabling user registration and authentication using **JSON Web Token**.

PROJECTS (more on github.com/dwang917)

Personal Website (https://damingwang.dev/):

- A personal page built with **React** and **Tailwind** frameworks, hosted on **AWS EC2** using Apache Web Server and the Cloudflare domain name service. The website is secured by an SSL certificate using CertBot.

Clue Game (https://github.com/dwang917/ClueGame):

- Led a team of 2 developers and implemented a multi-player board game following **Object Oriented Design** pattern using **Java** and **JUnit**. Used **Swing** for a fully functional Graphical User Interface.

AI Chatbot App with audio support (https://github.com/dwang917/ChatBot-App):

- Developed a native macOS AI assistant app using **OpenAI's GPT API**. The app stores and retrieves chat histories, supporting audio input for voice-based interactions and enhancing user accessibility.