

Daming Wang

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EDUCATION

Colorado School of Mines

M.S. in Computer Science (GPA: 3.86)

08/2023 - 05/2025

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

08/2019 - 05/2023

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

SKILLS

- **Proficient Languages:** Java | Python | C | C++ | C# | Rust | JavaScript | SQL | Bash
- **Tools:** Azure DevOps | AWS | Git | Embassy | React | STM32 | PostgreSQL | Linux | Express | Docker
- **Fields of Expertise:** Test-Driven Development | Embedded Development | Web Development | Agile Practice

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 device profit margin by 7%.
- Implemented a testbench GUI using Rust's egui framework, with real-time communication to the Python backend via **Unix Domain Sockets** for status updates, enabling an integrated workflow for technicians.
- Conducted feasibility research on replacing C with Rust for embedded development; developing an embedded GUI and firmware using **Rust Embedded Async** framework for the company's upcoming product.

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

- Designed and executed robust unit and integration tests 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 advanced **SQL** queries to store and audit the API responses.
- Spearheaded **Git** version control management for a multi-developer team, resolving 30+ complex merge conflicts and ensuring seamless **CI/CD** deployment via **Amazon Web Services**.

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

- Engineered a distributed event-driven architecture utilizing **Kafka** to bolster big data analytics pipelines, resulting in a 40% reduction in data processing latency.
- Migrated 4 monolithic applications to **Spring Boot** microservices; maintained and documented API endpoints; configured a Sumo Logic dashboard to monitor and alert any remaining traffic in the monolith services.
- Automated customer billing workflows by designing and deploying **Cron jobs** for scheduled credit memo delivery, reducing manual overhead by 4 hours/week.

Payne Institute, Golden, CO | Application Developer | 08/2021 – 05/2022 | (Node.js, React, Google Cloud)

- Constructed an interactive Gas Flare mapping web application using **Node.js**, **React**, and **ArcGIS API**, enabling users to visualize and analyze gas flaring data by querying desired features.
- Hosted and managed the application on **Google Cloud** with **Apache**, ensuring 99.9% uptime.

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

- Designed and developed the frontend for a blockchain-based web application for medication donation.
- Redesigned the on-chain data models and data ownership; connected the **React** frontend to the **Express** backend through **REST API** calls, enabling medication inventory management and user registration.

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.