Karryl Dumalag

kjdumalag@gmail.com | linkedin.com/in/karryl | github.com/KayeJD

EDUCATION

Arizona State University, Tempe, AZ **May 2025**
B.S.E, Computer Systems Engineering
- Coursework: Algorithms, Data Structures; Networks; Operating Systems; Computer Architecture

College of Southern Nevada, Las Vegas, NV **May 2021**
A.S., Applied Science (honors)

SKILLS

Programming Languages: Python, Java, C/C++, JavaScript, Typescript, SQL, HTML, CSS
Frameworks & Technologies: React, Next.js, .NET, PostgreSQL, REST APIs, AI/ML
DevOps & Cloud: Google Cloud Platform, Docker, Linux, CI/CD, Agile, Git

EXPERIENCE

Irenix | *Software Engineer Volunteer* **Jul 2025 - Present**
- Led a small cross-functional team of frontend and backend engineers to build a greenfield full-stack platform, contributing to backend architecture and predictive analytics using Python, and using React frameworks with Typescript for frontend web development.
- Designed and implemented containerized cloud infrastructure for an EHR system on Google Cloud, improving uptime by 25% and enabling scalable microservice data exchange.
- Optimized application data handling, reducing client-side latency by approximately 10% and improving overall performance.

General Dynamics Mission Systems | *Software Engineer Fellow* **Aug 2024 - May 2025**
- Accelerated automated testing by ~20% by creating a cross-platform testing framework tailored for secure communications distributed systems under strict DoD standards.
- Increased test coverage by integrating OCR-driven validation modules into the CI/CD pipeline, improving the accuracy and reliability of encrypted communication verification.
- Influenced later project direction by presenting detailed test reports and strategic recommendations to stakeholders, strengthening alignment across engineering and program teams.

28 Gorilla Engineering | *Software Developer Intern* **Mar 2024 - Apr 2025**
- Improved IoT testing efficiency in performance validation by 16% through creating a scalable, multi-threaded system that reduced real-time data latency during machine evaluations.
- Designed a real-time data pipeline to ingest and process high-frequency BMS telemetry, enabling low-latency analysis and dynamic charting for large-scale battery performance monitoring.
- Boosted team productivity by documenting workflows and implementing organizational improvements that streamlined daily operations.

Education At Work | *Enterprise Technical Support Specialist* **Jan 2023 - July 2023**
- Resolved an average of 40+ enterprise-level technical issues per week for Microsoft Surface devices by providing Tier 2/3 remote troubleshooting, system diagnostics, and escalation support, reducing client downtime by 25%.

PROJECTS

Personal Website: KayeJD.github.io

Volex – Banking App | *Next.js, TypeScript, Appwrite, Plaid, Dwolla, React, TailwindCSS* **Apr 2024 - Dec 2024**
- Built a secure, SSR-authenticated financial app with real-time transaction tracking and automated payments by integrating Plaid/Dwolla APIs and balancing performant UI design with robust backend logic.

Spotify Analytics Web Dashboard | *Javascript, Express.js, Pug, CSS, OAuth2* **Nov 2023 - Dec 2023**
- Engineered a real-time music analytics web dashboard enabling users to securely log in with Spotify and view their up-to-date listening statistics.