Miguel Valdez, Senior Software Engineer

Phoenix, AZ, mvg35w@gmail.com

PROFILE

Experienced Software Engineer with 7+ years in designing, testing, and managing complex systems. Known for a sharp analytical approach and a collaborative mindset, I deliver innovative, high-quality solutions that drive impactful results.

EMPLOYMENT HISTORY

Jan 2019 — Present

Senior Software Engineer, Applied Materials
Chandler, AZ

- **Leadership and Full-Stack Expertise:** Drive the development and deployment of critical applications across semiconductor Fabs globally, utilizing a comprehensive skill set with a focus on front-end technologies. Expertise in TS/Angular, Python, FastAPI, Jest/PyTest. Substantial experience with SQL databases, ZMQ, Docker, Jenkins, Module Federation, and TailwindCSS, and I am actively expanding my expertise in these areas.
- **Innovative Solutions and Team Collaboration:** Contribute to high-impact projects that enhance automation, analytics, and maintenance solutions. Play a pivotal role in creating and maintaining value-driven applications, while fostering a collaborative team environment. Participate in hiring, mentoring, and facilitating peer reviews to ensure continuous growth and knowledge sharing.
- **Key Projects:**
  Analytical Web Application: Contributed to a web application providing visual analytics, real-time alerts, and detailed reports to field engineers, improving fleet health and up time. Played a role in migrating from an in-house Typescript framework to Angular and developing a UI kit library for consistent module standardization.
  Preventive Maintenance System: Contributed to the development of a complex distributed system, built in Python and utilizing ZMQ for high-volume tool data ingestion. This system, with an Angular front end, is designed for diverse reporting needs, including preventive maintenance predictions and management. Employed advanced data analysis and secure communication procedures to ensure connectivity with highly secured semiconductor Fabs while adhering to robust data handling practices.
  Deployment and Management Platform: Played a key role in creating an advanced Python and Angular-based application that simplifies project setup, builds, and deployments. By leveraging Docker, JFrog, and encryption protocols, the platform not only manages deployments securely but also enables other groups and engineers to easily deploy their reports and applications across Fabs.

Jun 2016 — Jan 2019

Software Developer, Phidev
El Paso, TX

- Collaborated with agencies like Phidev, Aidan James, Thrive, PhaseOne Ventures, and PRDGL Creative on a range of web and mobile app projects.
- Contributed to developmen of full-stack applications using LAMP, MERN, and MEAN stacks; built mobile apps with React Native; and created websites with WordPress, Shopify, Magento, and custom HTML/CSS/JS.
- Designed and implemented RESTful APIs and front-end solutions for diverse sectors including insurance, logistics, food services, accounting, and music.
- Managed DevOps lifecycles to streamline deployment and maintenance processes.

Jan 2018 — Jan 2019

Research Assistant, Active Perception Lab, Boston University
Boston, MA

- Integrated experimental and theoretical neuroscience approaches to investigate human visual perception and replicate these mechanisms in artificial systems.
- Developed experiments in C and virtual environments in OpenGL for data collection, and used Python for analysis.

EDUCATION

Aug 2014 — Jan 2019

B.S. Computer Science, Boston University
Boston, MA

SKILLS

Angular + React + Typescript	Experienced	English + Spanish	Experienced
Python + FastAPI	Experienced	SQL	Skillful
Test-Driven Development	Experienced	Docker + Jenkins	Skillful