

Griffin Branham

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EXPERIENCE

BasX Solutions – Software Engineer II

2024 – Present

- Built a self-updating CLI application in Go, including cryptographic signature verification, that wrapped 4 other manufacturing data report tools to enable fast and centralized execution
- Created a custom fuzzy string matching module in Python that reduced a nominal $O(n^2)$ algorithm's execution time by 75%
- Integrated modern development practices into legacy Django app including separate deployment environments, Dockerization of app and databases, and deployment to GCP

Generac Power – Software Engineer II

2021 – 2023

- Created a gRPC API in Go for managing a solar battery controller, implementing a device command structure and graphs of user relationships to minimize failed requests due to conflicting or invalid commands
- Enabled users of a web portal for IoT solar inverters to view device status instantly, by caching Kinesis data in Redis and adding a blocking-polling mechanism to the backend Spring Boot API
- Added a firmware update system to a Spring Boot API for IoT solar inverters, enabling simple and inexpensive field upgrades by delivering signed firmware download packets over MQTT
- Automated the loading of new customer account information into Salesforce by creating a scheduled Celery task that eliminated data-entry errors and saved up to 2 man-hours per day
- Reduced load time by 95% for a Django web page containing thousands of database entries by optimizing SQL queries

Apple – Hardware Engineer III

2019 – 2021

- Managed 3 memory chip testing labs while providing comprehensive technical support, including the creation of a Python application to control an autonomous chip handler, enabling simultaneous testing of up to 300 devices

Micron – Systems Engineering Lead

2017 – 2019

Micron – Hardware Engineer I – III

2011 – 2017

- Supervised a memory chip testing lab, coordinating the efforts of 3 direct-report engineers where the team conducted comprehensive system-level validation for major networking customers, resulting in >\$20M in sales

EDUCATION

Washington State University – BS Electrical Engineering

2010