Zaw Ye Htut

Software Engineer
linkedin.com/in/zhtut | github.com/zhtut-dev
Open to relocation: Texas / Los Angeles, CA | No employer sponsorship required

Professional Summary

Software Engineer combining AWS Supply Chain application development with Python automation for embedded systems. Developed React interfaces and backend lead-time calculations; builds hardware-integrated validation tools with CAN/CAN-FD communication, logging, reporting, and CI/CD.

Professional Experience

HL Mechatronics | Auburn, MI
Systems Verification Engineer | Oct 2023 – Present

- **Python Application Development**: Developed a Python electrical-validation GUI with PCAN-USB X6 interfaces; implemented CAN messaging, measurement calculations, data capture, and reporting.
- **Tool Adoption & Maintenance**: Delivered the tool in 2023, enabling PCAN-based validation for automotive customer programs; maintain compatibility with software builds originally developed for Vector hardware.
- **Hardware-Integrated Test Software**: Built the Python application, hardware interfaces, GUI, logging, and reporting for a Raspberry Pi/CAN-FD low-level test prototype; delivered a working system now undergoing integration.
- **Response Validation**: Implemented CAN-FD command/response checks that distinguish positive and negative device responses and record outcomes for low-level validation.
- **Test Automation & Debugging**: Develop Python/CAPL frameworks with CANoe and CANalyzer for regression and integration testing; investigate communication and interface defects and document root causes.
- **Continuous Integration**: Implement Git and Jenkins CI workflows to automate validation checks and maintain traceability across software releases.

Amazon Web Services (AWS) | Miami, FL
Software Development Engineer | Aug 2022 – Jul 2023

- **AWS Supply Chain**: Developed React.js user-interface functionality for supply-chain planning workflows and operational visibility.
- **Backend Development**: Implemented backend lead-time calculations and Node.js REST APIs to support supply-chain planning and application integration.
- **Pipeline Monitoring**: Created Amazon CloudWatch pipeline alarms and application-health dashboards to support operational monitoring and issue investigation.
- **Cross-Functional Delivery**: Coordinated feature delivery with product, AI, and platform teams; contributed to code reviews, CI/CD workflows, and production defect investigation.

Technical Skills

Programming: Python, JavaScript, CAPL, C, C++
Web & APIs: React.js, Node.js, REST APIs, HTML/CSS
Tools & Delivery: Git, Jenkins, CI/CD, Amazon CloudWatch, Jira
Embedded & Test Tools: CAN, CAN-FD, PCAN-USB X6, Raspberry Pi, CANoe, CANalyzer
Testing: Test automation, regression testing, integration testing, log analysis, root-cause analysis

Education

Lamar University | 2022
Master of Science in Computer Science

Universiti Teknologi PETRONAS | 2019
Bachelor of Engineering in Electrical & Electronics Engineering