

JERRY(JIALONG) WANG

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Education

University of Ottawa

Expected Dec 2024

B.A.Sc Honours Electrical and Electronic Engineering, GPA: 4.0/4.0

Ottawa, Canada

Relevant Coursework: Computer Architecture, Signal and System Analysis, Electronics, Digital Signal Processing

Technical Skills

Languages: JavaScript, C/C++, Python, HTML/CSS, PHP/MySQL, MatLab

Technologies: AWS (Lambda, API, Step Fns), Azure, Git, React, Redux, Node.js, MongoDB, Docker

Hardware: Linux, RTOS, I2C, SPI, UART, CAN, Ethernet, Wi-Fi, BLE

Experience

Apple Inc.

May 2024 - Present

Product Quality Engineer Intern

Shenzhen, China

- **Automated Optical Inspection(AOI):** Responsible for the Design for Manufacturability(DFM) of AOI systems, developed machine learning algorithms (**Objective Detection and Anomaly Detection**) to inspect Graphic Database System (GDS) data. Successfully captured **true GDS** instances during mass production, achieved an overkill rate and escape rate of **0%**.
- **Tool Development:** Product Owner for an automated reporting tool to help inexperienced **CM DRI,PQM/STM** deliver more accurate machine learning results in Apple's preferred data format. The web application was developed using **React.js** for the front end, **Django** for the back end, and **Redis,MySQL** for efficient data management.
- **Data Generation:** Leveraged **Tableau** to access and integrate data from Apple's internal data website, enabling advanced data visualization and in-depth analysis to uncover actionable insights.

EcoSafeSense

May 2023 - Apr 2024

System Design Engineer Intern

Ottawa, Canada

- The **ARM Cortex-M microcontroller** is utilized in the design of an IoT sensor that integrates multiple sensor elements. By combining **BLE and Wi-Fi** technology for wireless data transmission. The underlying driver is developed using **C++** and **RTOS**.
- Develop mobile applications using **Java (Android)** and **Swift (iOS)** and utilize **Python (Dash)** for efficient processing and analysis of environmental data.
- An environmental data monitoring system was created using **Tableau** and **Python** to achieve real-time monitoring and data analysis.

University of Ottawa

Sept 2022 - Apr 2023

Engineering Program Manager Intern

Ottawa, Canada

- Led design and verification processes using software(**C++**, **Linux**) and hardware(**Battery Analyzer**, **Oscilloscope**)to ensure have high-quality battery. Achieved a **23%** improvement in team work efficiency and reduced fault tolerance rate by **40%** through effective project management and quality control.
- **Technical Support:** Embedded design of products by using **X86 platform**. Responsible for product circuit design from Prototype, EVT and PVT (integration, layout, verification, failure analysis).

Apple Inc.

Apr 2022 - Sept 2022

System Test Design Lead Intern

Shanghai, China

- **Mix Cell Tester:** Responsible for overseeing the **product function design** and **circuit design** process, from prototype development to **PVT**. The tester facilitates the compliance of **8 battery CMs** with ERS , ensures data protection and test coverage requirements while **saving a \$45 million budget** and improving test efficiency by **14%**
- **Data Automation::** Use **Python** and **Tableau** to automate data uploads for battery CMs across **8 Apple LoBs**, support factories and Apple reliability teams in securing test data, and enhance data processing efficiency by **13%**.

KPMG LLP

June 2021 - Aug 2021

Risk Consultant Intern

Beijing, China

- Developed a compliance analysis tool using **Seaborn**, **Pandas**, and **MySQL** for a German car brand, processing over 4 million data rows and identifying key compliance violations.
- Led the enhancement of a UK car brand's resource management system using **Statsmodels**, **Pandas**, and **NumPy**, improving system approval efficiency by **23%** and reducing financial errors by **16%**.