# Richard Le





Education -

# San Jose State University

Bachelor of Science in Computer Engineering

Graduated 2020

Experience -

**Symantec** – (Acquired by Broadcom)

Mountain View, CA

May 2019 - Nov 2019

# **Software Engineering Intern**

- Designed, developed, and deployed an internal tool using AWS Services (CloudWatch, S3, SES, SQS, Lambda), which automated a workflow task for on-call Site Reliability Engineers.
- Implemented multi-threaded Python script that reduced ETL data retrieval time by 96%.
- Developed an ETL Pipeline to parse complex CloudWatch Metrics and load into HTML template, which enhanced readability and eliminated manual log checking.
- Developed backend framework of the internal tool with **RESTful** APIs and extracted **JSON** data.
- Refactored DevOps Configs with YAML Anchors, significantly increasing codebase maintainability

Projects

### **E-Commerce Web Scraper**

Python, Selenium WebDriver

- Developed scripts to automate data scraping for over 500 marketplace webpages daily, leading to large formatted CSV datasets for financial analysis and decision making.
- Designed simple input data formats to aggregate data for long-term and large-scale processing.

#### Mobile AI Application QA Testing

Java, Selenium, Appium, JUnit

- Full end-to-end QA testing process of educational mobile AI Application: Photomath.
- Planned and documented full test report including test models, methodologies, and results.
- Designed, developed, and automated 50+ JUnit test cases using Selenium and Appium.

#### **AHK Automation Script Testing**

- Designed, developed, and tested over 20 AHK (AutoHotKey) Scripts.
- Extensively ran automation testing for over 3800 hours (6-8H/day for over 1.5 years), continuously optimizing design and fixing any automation issues.

# Cloud IoT Security Camera

Python, AWS, Raspbian OS, Flask, OpenCV

- Designed and developed a security camera using Raspberry Pi and AWS services (S3, SES, SNS).
- Created motion tracking using **OpenCV**. Hosted lightweight monitoring server using **Flask**.

# **Air Quality Index Notifier**

Interactive Slack bot for precise Air Quality Index data. Integrated with Twilio SMS alerts for critical AQI warnings & notifications. AQI Data extracted from Breezometer RESTful API.

Skills

Programming Languages: Python, Java, C **Cloud Technologies**: Amazon Web Services AWS (CloudWatch, S3, SES, SQS, SNS) Testing Tools: Selenium, WebDriver, JUnit,

PyTest, Appium

Databases: MySQL

Technologies: Windows, Linux, Git, RESTful API, Flask, OpenCV, HTML, CSS, AHK (AutoHotKey) Processes followed: Scrum, Agile, CI/CD