Andrew Le

letriandrew@gmail.com • (951) 378-3627
linkedin.com/in/letriandrew • github.com/letriandrew

Education

Master of Science, Data Science **Jan 2024 - May 2026**
University of Colorado Boulder

Bachelor of Science, Computer Science **Aug 2018 - May 2023**
California State University San Marcos

Professional Experience

Software Engineer Intern - Automation **Jun 2025 - Dec 2025**
Panasonic Avionics Corporation

- Developed a **Python**-based test automation framework that standardized QA processes across 300+ customer airline hardware platforms and custom front-ends, supporting $8M+ in systems while improving architecture and reducing automation runtime
- Accelerated automation pipelines by 35%, saving $5M+ in engineering time by scripting end-to-end QA workflows using proprietary APIs, **Selenium**, **Appium**, **Squish**, and network programming within **Docker**ized environments
- Built a department-wide utility library by refactoring core logic into modular, reusable components, reducing feature delivery timelines by 33% across airline and aircraft configurations
- Designed and validated AI-driven test script generation by parsing customer requirements into structured, high-level functions, cutting manual test design costs by $1M+
- Operated **CI/CD** pipelines to orchestrate 24-hour **Docker**ized regression and endurance tests, automating multi-service scenarios, configuration variants, and centralized log aggregation using GitLab CI and YAML setup
- Led peer code reviews and debugging efforts, applying SOLID principles to improve automation quality, technical documentation, and regression lifecycle management

Software Test Engineer **Nov 2023 - Feb 2025**
Panasonic Avionics Corporation

- Managed systems and infrastructure integration for $5M+ in in-flight entertainment systems deployed on active aircraft for major airlines including Air Canada, WestJet, and Cathay Pacific
- Troubleshot in-flight entertainment hardware and software across multiple aircraft platforms, ensuring operational reliability and compliance with safety and customer standards
- Reduced mean time to resolution by 20% by documenting and analyzing 150+ **Jira** incidents with detailed logs and root-cause assessments spanning software, hardware, and network layers
- Developed **Bash**-based automation to streamline data collection and establish secure SSH access, leveraging **Linux** utilities, shell scripting, and network protocols to accelerate issue resolution

Software Engineer Intern **Jun 2022 - Sept 2022**
Trees.app

- Designed mobile app interfaces in **Figma** with multi-screen navigation, utilizing **Flutter** and **Dart** and incorporating insights from 100+ user reports to enhance gamification and usability
- Optimized and refactored **Python** backend systems and algorithms, improving function efficiency and reducing runtime by 18.3%

Personal Project

Multiband Compressor Audio Plugin

- Engineered a cross-platform audio plugin in C++ using the JUCE framework, implementing a 3-band compressor with real-time spectrum analysis to improve audio clarity for musicians and producers
- Applied advanced DSP techniques including Linkwitz–Riley crossovers, all-pass phase inversion, and multi-band compression, achieving sub-5 ms latency across tested audio environments
- Developed an interactive GUI with custom components such as rotary sliders, band toggles, and spectrum visualizations, enhancing parameter accessibility and real-time mixing feedback

Skills

Languages: Python, C++, SQL, Java, JavaScript, R, Assembly, Dart, Bash/Shell Scripting, HTML/CSS
Frameworks & Tools: Selenium, Squish, React, AWS, Docker, GitLab CI/CD, SonarQube, Maven, Gradle
Technical: RESTful APIs, Microservices, Unit Testing, Git, Agile Development, Jira, Linux, PowerShell, Grafana