

Andrew Lara

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Summary

Entry-level Software Engineer with experience researching, designing, and maintaining software systems across the full development lifecycle. Skilled in Python, JavaScript/TypeScript, Java, and NoSQL. Hands-on experience performing software updates, debugging, testing, and documenting complex systems for long-term maintainability. **U.S. Citizen TS/SCI w/ Poly Eligible**

Technical Skills

- **Languages:** Python, JavaScript/TypeScript, Java, C/C++, Bash
- **Frontend:** React, Next.js, HTML/CSS, Tailwind, shadcn/ui
- **Backend/APIs:** REST, JSON, OAuth2, Node.js (Express), Webhooks, cron/scheduling
- **Data:** PostgreSQL/MySQL, SQLite, Pandas/NumPy, ETL, data validation/quality, MongoDB
- **Cloud/Dev:** Git/GitHub, Linux, CI/CD (GitHub Actions), Vercel/Render, Docker, CI/CD
- **Software Engineering:** Software Development, Software Systems, Web Application Development
- **Product/Tools:** Jira/Asana/Notion, Figma, telemetry/analytics, technical writing

Work Experience

North Atlantic Treaty Organization (NATO)

Aug 2021 - May 2024

Research Software Engineer

Lancaster, PA

- Created technical models and diagrams (API flows, schema maps, data pipelines) used by developers during system updates and long-term maintenance.
- Implemented validation scripts and CI checks to enforce API/ETL spec compliance and automate software updates
- Researched, analyzed, and documented software system behaviors for multinational engineering teams; produced API, schema, and data-pipeline documentation for long-term maintenance.

CommonWheel

Feb 2023 - May 2023

Software Engineer/PM

Remote

- Analyzed user/business needs and translated them into technical specs, models, and acceptance criteria for app development.
- Maintained documentation and decision logs supporting future system updates, debugging, and long-term maintainability.
- Participated in SDLC planning, prioritization, and refinement to ensure changes met functionality, reliability, and security needs.

Keep Youth Doing Something (KYDS)

Oct 2024 - May 2025

Instructor - Robotics & Coding

Los Angeles, CA

- Delivered 50+ labs on software logic, debugging, and iterative system refinement, increasing engagement by 19%.
- Guided students through identifying and debugging software issues, testing software behavior, and refining system logic through iterative development.

SportscarLA

Jun 2025 - Present

Technical Operations Manager

Los Angeles, CA

- Performed ongoing software updates and modifications to internal systems, improving reliability of pricing workflows by 30%.
- Automated 5+ workflows (sticker gen, cross-platform listings, reply templates) cutting per-vehicle admin steps and improving time-to-list by 67% (Python/Sheets + SOPs).

Education

Franklin & Marshall College

Aug 2020 - May 2024

Bachelors Degree, Computer Science

- **Achievements:** Engineering focus on systems programming, distributed architecture, networking, and software reliability.
- **Coursework:** Distributed Systems, Computer Networks, Operating Systems, Data Structures & Algorithms, Probability & Statistics

Projects

Used-Car Ops Platform (multi-dealership ready) | [Repository](#)

May 2025 - Present

Python • Google Sheets API • Chrome Extensions • React

- Built ETL pipelines and data checks to centralize inventory, pricing, and sales; enabled weekly data-driven pricing decisions.
- Automated reporting and alerts via Python + Sheets API/Apps Script, cutting reporting cycle time by 70% and saving 10+ hrs/month.
- Tailored unique solutions to meet company-wide requirement.

Habit Battles | [Repository](#)

Aug 2025 - Present

Node.js • Express • MongoDB • Mongoose • AWS Lambda

- Planned and designed software systems across backend components to ensure reliability and maintainability.
- Implemented automated system updates using scheduled Lambda functions to generate immutable daily records.
- Designed data schemas, controllers, and validation rules aligned with clean architecture principles.