

# Alexander Herlan

## Senior Software Engineer DevOps & IT Manager

1207 El Portal NW, Albuquerque, NM 87107

813-402-8692 alexwherlan@gmail.com alex.herlan.dev LinkedIn GitHub

### SUMMARY

---

Senior software engineer specializing in full-stack Python and JavaScript development, REST APIs, and cloud deployment. Built web platforms for real estate, membership management, and mortgage lending, plus Android applications using machine learning. Background includes DevOps, database modernization, healthcare systems, and IT management.

### WORK EXPERIENCE

---

#### Independent Software Developer / Freelancer

JUNE 2024 - PRESENT

- Deliver web and mobile applications for clients sourced through Upwork, agency partnerships, and referrals, covering architecture, implementation, cloud deployment, and ongoing support.

#### Selected Projects

##### Equity Funding Source

APRIL 2026 - JULY 2026

- Built a mortgage-lending platform with Preact and Bun for borrower applications, lender collaboration, administrative oversight, and secure document handling.
- Deployed Cloudflare Workers and D1 for application logic and data, Durable Objects for real-time messaging, and R2 for document storage.

##### IIPM.ie

APRIL 2025 - MARCH 2026

- Expanded WordPress landing pages into a PHP and PostgreSQL membership platform supporting individual and organizational applications, qualification requirements, annual payments, and course-progress reviews.
- Automated program timelines, approved-leave calculations, and PDF certificate issuance; built administrative dashboards for membership, onboarding, qualifications, payments, and course progress.

##### SafeSchoolz

JUNE 2024 - JUNE 2025

- Developed two Android applications, Media Pipe and Aegis, in Java and Kotlin to detect firearms and coordinate alerts with the .NET-based HeroEyez portal.
- Evaluated YOLO and adopted TensorFlow Lite for mobile detection; trained and tested the model using more than 10,000 firearm images from Roboflow and custom samples.
- Integrated screenshots, one-minute evidence clips, and a Twilio call workflow into incident alerts; deployed the application in June 2025 before commercial rollout was paused.

#### Covius, LLC / Senior Software Engineer

JANUARY 2022 - APRIL 2024 | POMPANO BEACH, FL

- Redesigned RealtyBid.com frontend and backend components with the engineering team, integrating REST APIs and asynchronous updates for real-time auction status.
- Built responsive Angular and RxJS interfaces for desktop and mobile users, refining the experience with QA testers and business partners through iterative sprints.
- Adapted a legacy database for the redesigned platform and developed internal tools for website administration and customer support.

## **SEAD Software / Software Engineer**

APRIL 2021 - JULY 2022 | DELRAY BEACH, FL

- Implemented Python document processing with the Google Cloud Vision API to recognize and categorize physical laboratory documents.
- Created a Twilio text messaging application to automate customer responses and generate leads for law firms.
- Configured AWS infrastructure and Azure DevOps development pipelines; trained staff on Azure DevOps and maintained a shared Git repository for multiple clients.

## **Clarity Diagnostics & Lab Solutions / Director of IT**

SEPTEMBER 2020 - JANUARY 2022 | BOCA RATON, FL

- Directed IT operations for a medical laboratory and diagnostics manufacturer expanding to serve organizations nationwide, including local and state governments.
- Implemented laboratory badge access and email security standards across Google Workspace and Microsoft 365; supported laboratory expansion and medical equipment quality assurance.
- Managed IT staff, client-facing websites, and software quality control, deployment, and training for sister company SEAD Software.

## **MyTap, aka Which Craft / Lead Developer**

JANUARY 2016 - APRIL 2020 | ALBUQUERQUE, NM

- Engineered a Python Scrapy pipeline and natural language processing logic to derive craft beer flavor profiles from adjective frequency in online reviews.
- Delivered a mobile-friendly recommendation application with designers, backed by Django and PostgreSQL.

## **TriCore Reference Laboratories / Production Support Specialist**

APRIL 2013 - JANUARY 2017 | ALBUQUERQUE, NM

- Served as the sole overnight production support specialist for an environment supported by 60 staff during the day, handling monitoring, troubleshooting, and escalation.
- Resolved time-sensitive hospital IT issues, monitored patient-record transfers across medical systems, and supported Sunquest applications; trained help desk staff and provided on-call assistance.

## **TECHNICAL SKILLS**

---

- **Languages:** Python, JavaScript, TypeScript, PHP, Go, Java, Kotlin, C, C++, HTML, CSS, Sass.
- **Frameworks and APIs:** Django, Flask, Angular, RxJS, Preact, Node.js, Bun, WordPress, REST APIs, Twilio, Scrapy.
- **Databases:** PostgreSQL, Microsoft SQL Server, MySQL, MongoDB, CouchDB, Redis.
- **Cloud and DevOps:** AWS, Azure DevOps, Cloudflare Workers, D1, Durable Objects, R2, Docker, Kubernetes, Linux, Git, Jira.
- **Machine Learning and Mobile:** TensorFlow Lite, Google Cloud Vision API, natural language processing, Android.

## **EDUCATION**

---

### **University of New Mexico**

Programming studies: Beginning Programming in C++, Intermediate Programming in C++, Advanced Visual C++, Beginning Visual Basic, Intermediate Visual Basic.

### **Central New Mexico Community College (aka TVI)**

Coursework: Beginning, Intermediate, and Advanced Photoshop; Introduction to Lightwave 3D.