Alexander Herlan

Senior Software Engineer | DevOps & IT Manager

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Professional Summary

Senior software engineer with over 27 years of hands-on technology experience spanning software engineering, web design, database engineering, IT management, computer repair, and user experience design. My primary focus is full-stack web application development with Python and JavaScript.

Through professional roles, freelance work, and side projects, I have expanded my skills in DevOps, Docker, Kubernetes, cloud deployment, and resource management. I continue to explore Web3 and emerging technologies, and I am seeking a software engineering role where I can build reliable applications and contribute across the development lifecycle.

Work Experience

Software Developer / Freelancer

Self-employed

Remote

June 2024 - Present

I develop and support web and Android applications for freelance clients, translating business requirements into working software. My work covers membership administration, e-commerce, automated document workflows, mobile object detection, and integrations with existing systems, from implementation through deployment, client feedback, and ongoing maintenance.

- Developed Irish Pension Management as a freelance client project with an agency partner, expanding WordPress landing pages into a PHP/PostgreSQL membership application. Implemented individual and organisational applications, qualification checks, annual payments, course-progress reviews, administrative dashboards, and PDF certificates. Automated programme timelines, approved-leave handling, and certificate issuance.
- Built two Java/Kotlin Android applications for the HeroEyez freelance client project and integrated them with its existing .NET portal. Implemented TensorFlow Lite firearm detection from device and IP-camera feeds, screenshot and video evidence capture, alerts, and a Twilio call workflow. Evaluated YOLO and trained and tested detection models using more than 10,000 images. Deployed the complete workflow in June 2025; broader rollout was later paused because of market and regulatory constraints.
- Provide occasional website maintenance and updates for James & James Furniture, whose original WordPress and WooCommerce store I designed and developed in 2017. Customized a branded, responsive theme and implemented product catalogs, galleries, customer reviews, inventory management, promotional discounts, shipping calculators, payment gateway integrations, and checkout. Improved page loading through caching and image compression.

Senior Software Engineer

Covius, LLC

Pompano Beach, FL

January 2022 - April 2024

At Covius, a nationwide real estate technology and holdings company, I contributed to the frontend and backend redesign of RealtyBid.com, an online real estate auction platform. The platform combined a REST API backend, a responsive JavaScript frontend, and asynchronous updates to provide users with real-time auction status. I also built internal tools for website administration and customer support.

- Contributed to the complete redesign of a major legacy website containing extensive historical data.
- Helped manage and adapt a legacy database to support the redesigned platform.
- Built a responsive web application frontend for desktop and mobile browsers.
- Refined the user experience with QA testers and business partners through iterative sprints and testing sessions.
- Developed frontend functionality using Angular and RxJS.

Software Engineer

SEAD Software

Delray Beach, FL

April 2021 - July 2022

At SEAD Software, I used Python and web development skills to build web applications and deliver business analytics for healthcare and legal clients. I also improved company-wide development operations with Azure DevOps and development pipelines to streamline team coordination.

- Designed and implemented Python code using the Google Cloud Vision API to recognize and digitally categorize physical laboratory documents.
- Developed a text messaging web application using the Twilio API to automate customer responses and generate leads for law firms.
- Maintained and implemented Amazon Web Services infrastructure to support multiple projects
- Implemented and trained staff on Microsoft Azure DevOps development platform infrastructure
- Maintained a large Git code repository for multiple clients

Director of IT

Clarity Diagnostics & Lab Solutions

Boca Raton, FL

September 2020 - January 2022

Managed IT operations and technology decisions for a medical testing laboratory and diagnostics test manufacturing business. Supported the company's expansion to work with organizations nationwide, including local and state governments. I also managed software quality control, deployment, and training for its sister company, SEAD Software.

- Implemented a physical keycard/badge access security system for the entire laboratory facility
- Implemented and maintained security standards for email and cloud-based applications in Google Workspace and Microsoft 365
- Maintained client-facing websites
- Expanded laboratory infrastructure and assisted with quality assurance testing of medical equipment
- Managed and instructed other IT staff in their daily responsibilities

Lead Developer

MyTap, aka Which Craft

Albuquerque, NM

January 2016 - April 2020

At this startup, I collaborated with a team of designers to build a craft beer recommendation engine using web scraping and natural language processing (NLP) of online beer reviews. This work introduced me to practical applications of machine learning and AI.

- Implemented a robust web scraper in Python using the Scrapy Python library
- Created a responsive web application frontend for mobile browsers
- Designed custom natural language processing code in Python to create craft beer flavor profiles based on adjective frequency in craft beer review text.
- Maintained a Django backend serving data from a PostgreSQL database

Production Support Specialist

TriCore Reference Laboratories

Albuquerque, NM

April 2013 - January 2017

Provided technology support to staff across multiple regional hospitals. Responsibilities included urgent password resets, troubleshooting healthcare applications such as Sunquest, retrieving patient medical records and diagnostic information, and monitoring systems for performance issues and errors.

- Solely monitored and supported the company production environment overnight, handling troubleshooting and escalation for an environment supported by 60 staff during the day.
- Monitored the transmission of patient records between hospitals using different medical record systems and healthcare applications.
- Guided medical staff through time-sensitive IT troubleshooting affecting patient care.
- Monitored critical hospital infrastructure for performance and errors, correcting them promptly.
- Trained new help desk employees on their daily tasks and responsibilities
- Remained on-call off hours for emergency assistance.

Software Engineer, Web Application Developer, IT Consultant

Desert Digital Consulting

Remote

October 2010 - January 2021

Provided freelance services in software development, web design, information technology, and computer hardware design.

Technical Skills

Programming Languages

Python (Flask, Django), JavaScript (Node.js, jQuery, Angular, AngularJS, RxJS), TypeScript, Go, PHP (WordPress, WooCommerce), Java, Kotlin, C, C++, CoffeeScript, HTML5, CSS3, Sass

Database Technologies

- **SQL:** Microsoft SQL Server, MySQL Server, PostgreSQL Server
- **NoSQL:** MongoDB, CouchDB, Redis
- **Other:** Microsoft Access, Microsoft Excel

Applications

- **Programming:** Microsoft Visual Studio, Visual Studio Code, PyCharm, Sublime Text 3, Devart dbForge, Microsoft SQL Studio, Vim, Eclipse, Git
- **Design:** Adobe Photoshop, Adobe Dreamweaver, Adobe Illustrator, Adobe Edge, Adobe InDesign
- **Productivity:** Microsoft Office, Google Docs (Drive), WordPerfect Suite
- **Virtualization:** VMware, VirtualBox, Docker, Kubernetes

Cloud Technologies

- Microsoft 365 and Google Workspace Administration
- Amazon Web Services (AWS) Administration
- Microsoft Azure DevOps Administration

Other

- Jira Agile Project Management skills
- Responsive web design
- Advanced (and remote) Linux administration
- Search engine optimization (SEO) for Google and Bing
- Social media presence implementation (Facebook, Twitter, Instagram, etc.)

Education

University of New Mexico

BS, Computer Science

September 2003 - September 2008

Certifications

- Beginning Programming in C++
- Intermediate Programming in C++
- Advanced Visual C++
- Beginning Visual Basic
- Intermediate Visual Basic

Central New Mexico Community College (aka TVI)

- Beginning Photoshop
- Intermediate Photoshop
- Advanced Photoshop
- Introduction to Lightwave 3D

References

David Foy | Senior Software Engineer | *Covius* | 407-954-1245

Warren Wright | CEO | *SEAD Software* | 201-988-1513

Ashley Park | Director | *Clarity Diagnostics* | 508-341-5387

Douglas Radecki | CEO | *MyTap / Which Craft* | 505-400-4636