Shawn Underwood

Software Engineer

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PROFESSIONAL SUMMARY

Software Engineer with 8+ years of experience specializing in full-stack development, machine learning, and cloud solutions. Proven track record of delivering scalable applications using .NET, Python, and JavaScript frameworks. Experience implementing AI/ML solutions and managing cloud infrastructure.

SKILLS

Languages:	C#, Python, JavaScript, Go
Frameworks:	.NET: Blazor, Framework, Core Python: Django, Flask, FastAPI JavaScript: React, Vue, Angular
Cloud & DevOps:	AWS, Google Cloud, Azure, Terraform, Docker, Kubernetes, GitHub Actions, Azure DevOps, Linux, Windows Server, VMware, Firebase, Railway, Linode
Database:	Qdrant(Vector), PostgreSQL, MongoDB, MySQL, SQL Server, SQLite
Machine Learning & AI:	RAG, LLaMA Models, TensorFlow, PyTorch, Scikit-learn, Keras, FastAl, OpenAl GPT, Hugging Face, IBM Watson, LUIS, DialogFlow, Claude, MCP

EXPERIENCE

Volano Software - Software Engineer DECEMBER 2023 - PRESENT

- Lead AI/ML integration projects, implementing machine learning models and intelligent automation solutions for diverse client applications
- Collaborate with a medium-sized team to build new websites using Vue.js/Nuxt and .NET Core
- Specialize in building communication services using Twilio and SendGrid
- Deliver custom solutions for new client contracts within rapid 3-month development cycles
- Contribute to other projects by creating reusable services to streamline development

FSC Edge - Software Engineer JANUARY 2021 - DECEMBER 2023

- Lead the production workflow managing and greatly contributing to Python project processing United States patents
- Ensured production workflow consistently met deadlines and provided overnight fixes when needed

- Collaborated with colleagues in France, working on shifted hours, and traveled overseas twice for software training
- Created an API for validating US patents using machine learning to ensure validation of work

ICF International - Software Engineer AUGUST 2016 - DECEMBER 2020

- Lead daily standup / JIRA morning meetings with the team and directors
- Developed numerous JavaScript features to meet client needs, growing to require a dedicated team
- Built machine learning application using Microsoft LUIS and Python TensorFlow to analyze audio recordings
- Developed call center management portal with schedule and attendance features using ASP.NET and Azure
- Created machine learning application using Python TensorFlow with NLP algorithms to analyze documents

Union Pacific Railroad - New Growth Engineer DECEMBER 2014 - JULY 2016

- Project Lead in company-wide mobile app rollout managing inventory, system activation, and software configuration
- Developed an Angular mobile application using Cordova for company-wide deployment

NOTABLE PROJECTS

<u>Voicemailmachine.com</u> — Smart voicemail management service built with Twilio, IBM Watson, and Python FastAPI with Kafka. Later rebuilt with Vue.js frontend and .NET Core backend.

AWS DevOps Pipeline Demo—DevOps pipeline featuring FastAPI backend, vanilla JS frontend, PostgreSQL database, and AWS infrastructure with Terraform IaC, Docker containerization, ECS deployment, and automated CI/CD via GitHub Actions.

<u>Document QA</u>— Document interaction platform that enables uploading PDFs, DOCX, and TXT files to create AI-powered chat interfaces. Built with Svelte and .NET Core supporting both cloud and local models with embeddable interfaces.

<u>Huberman Archive</u> — Al-driven RAG search tool using open-source LLaMA models and Qdrant Vector Database for podcast transcript search and insights.

<u>Underwoodmovies.com</u> — Dynamic Vue.js and .NET Core web application with proxy architecture, deployed on Railway using Docker with CI pipeline.

<u>Blazor Survey</u> — Survey workflow solution created with Blazor (.NET 8), offering seamless survey processing across web and communication platforms.

Other Projects:

- Speech and Text Machine Learning Applications (Python TensorFlow)
- Android apps (Java & Kotlin) on Google Play Store
- Google Voice Assistant (Dialogflow, Python Flask webhook, AWS)

EDUCATION

The University of Nebraska at Omaha

Bachelor's in Computer Science AUGUST 2015 - MAY 2017

Iowa Western Community College

Associate's in Computer Science AUGUST 2013 - MAY 2015