

# 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

<b>Languages:</b>	C#, Python, JavaScript
<b>Frameworks:</b>	.NET: Blazor, Framework, Core Python: Django, Flask, FastAPI JavaScript: React, Vue, Angular
<b>Server Services:</b>	Azure, Linode, AWS, Google Cloud, Linux, Windows Server, VMware, Firebase, Kubernetes, Docker, Kafka, Railway
<b>Database:</b>	Qdrant(Vector), PostgreSQL, MongoDB, MySQL, SQL Server, SQLite
<b>Machine Learning &amp; AI:</b>	RAG, LLaMA Models, TensorFlow, PyTorch, Scikit-learn, Keras, FastAI, OpenAI GPT, Hugging Face, IBM Watson, LUIS, DialogFlow

## EXPERIENCE

### Volano Software - Software Engineer *DECEMBER 2023 - PRESENT*

- Maintain .NET 4.8 websites for clients, adding new features and resolving bugs
- 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
- 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
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## NOTABLE PROJECTS

[Voicemailmachine.com](#) – Smart voicemail management service built with Twilio, IBM Watson, and Python FastAPI with Kafka. Later rebuilt with Vue.js frontend and .NET Core backend.

[AI Code Assistant](#) – Intelligent code assistant for developers to upload repositories and receive detailed implementation guidance. Uses Tree-sitter for code analysis with PostgreSQL + Qdrant Vector DB.

[Document QA](#) – 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.

[Huberman Archive](#) – AI-driven RAG search tool using open-source LLaMA models and Qdrant Vector Database for podcast transcript search and insights.

[Underwoodmovies.com](#) – Dynamic Vue.js and .NET Core web application with proxy architecture, deployed on Railway using Docker with CI pipeline.

[Blazor Survey](#) – 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)
  - Call Center Management Website (.NET Framework, Windows Server)
  - Android apps (Java & Kotlin) on Google Play Store
  - Google Voice Assistant (Dialogflow, Python Flask webhook, AWS)
  - Patent Search API (FastAPI, Redis, Linode database cluster)
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## 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*