SAMUEL VILLA-SMITH, MBA

# Senior Software Engineer

📧 [svillasmith2@gmail.com](mailto:svillasmith2@gmail.com) | 📱 (806) 440-2215 | 🏠 Fritch, TX

🔗 <https://www.linkedin.com/in/samuel-villa-smith-mbaa803a0109> | 🌐 <https://github.com/samvillasmith> |

# PROFESSIONAL SUMMARY

Experienced Senior Software Engineer with strong background in secure cloud-native applications and full-stack development. Data-driven PhD student in Information Technology with expertise in AI, Machine Learning, and Natural Language Processing (NLP). Combines technical expertise with business acumen to architect and develop robust, security-first web and mobile solutions. AWS Solutions Architect certified with proven experience in implementing defensive security measures and optimizing application performance.



# TECHNICAL SKILLS

**Development**: React, TypeScript, Next.js, Node.js, Tailwind CSS, Shadcn UI, T3 Stack, Full- Stack Development

**Data & AI**: Advanced Analytics, Data Visualization (Matplotlib, Seaborn), Machine Learning, NLP, Scikit-learn, RAG, Langchain, Vector databases (Pinecone, Upstash)

**Cloud & DevOps**: AWS, Vercel, CI/CD, Microservices, Serverless Architectures, DevSecOps **Security**: Application Security, Penetration Testing, Vulnerability Assessment, Identity & Access Management

**Database**: MySQL, MongoDB, Prisma ORM, SQL

**Programming**: Python, Java, TypeScript, JavaScript

# PROFESSIONAL EXPERIENCE

## Principal Full-Stack Software Engineer

## Masada Systems (Self-employed)

## *(October 2024 - Present) Amarillo, Texas (Hybrid)*

* Architects and develops secure web and mobile solutions as an independent full-stack developer, specializing in hardened T3 stack applications
* Engineer security-first frontend experiences using React, TypeScript, Next.js, Tailwind, and Shadcn UI
* Implement fortified backend solutions through Prisma with encrypted MySQL and MongoDB databases
* Secure large language models (LLMs) and conversational AI tools with robust authentication, rate limiting, and input validation
* Deploy and maintain production-grade applications on AWS and Vercel platforms, implementing comprehensive DevSecOps practices
* Develop responsive applications with defense-in-depth strategies, ensuring protection of sensitive data while maintaining high performance standards

## Senior Software Engineer

## Oasis Technology & Engineering (Astrion)

## *(August 2020 - April 2024) San Antonio, TX (Remote)*

* Spearheaded development and modernization of cloud-native mobile and web applications for a major government client
* Designed and implemented cloud-based architectures using innovative paradigms, enhancing application security and user satisfaction
* Collaborated with cross-functional teams to lead data-driven product changes using Agile methodologies
* Conducted data analysis to provide insights and recommendations for architectural, policy, and process improvements
* Transformed business goals and end-user needs into product strategy
* Participated in software vendor selection, program decision support, and MVP development
* Mentored junior and mid-level personnel while ensuring project quality, security, and compliance requirements

## Freelance Software Engineer

## Masada Systems

## *(June 2016 - February 2021) Amarillo, TX and Be'er Sheva, Israel (Remote)*

* Directed digital transformation for a nonprofit, enhancing IT alignment through the launch of a web app
* Managed Agile cross-functional teams, turning business goals into actionable product strategies
* Led major data migration effort to overhaul organization's data management systems, improving security



# NOTABLE PROJECTS

## AI Companion Platform *(August 2025-Present)*

* Engineered a sophisticated AI companion platform featuring 10 specialized chatbot caegories
* Built custom companion creation functionality with React, TypeScript, and Next.js
* Developed robust backend using PostgreSQL, Prisma ORM, and OpenAI integration
* Implemented user authentication and Stripe integration for premium features
* Created engaging, personalized conversational AI experiences

**Coats-Music.com *(October 2024 - Present)***

* Built a comprehensive virtual guitar learning application as full-stack principal software engineer
* Implemented the T3 stack (TypeScript, Tailwind, tRPC) for a type-safe, modern architecture
* Deployed and maintained the application on Vercel, ensuring optimal performance
* Managed entire project lifecycle from conception to deployment



# EDUCATION

**Doctor of Philosophy (PhD) in Information Technology** *(Expected 2026)*

University of the Cumberlands

### Master of Business Administration (MBA)

Liberty University, 2019

### Bachelor of Science (B.S) in Interdisciplinary Studies

*Business Administration & Criminal Justice*

Liberty University, 2016



# CERTIFICATIONS

* **AWS Solutions Architect - Associate** *(July 2022 - July 2025)*
* **CompTIA Security+** *(April 2019 - April 2028)*

