# Samuel Villa-Smith

Fritch, TX | email: svillasmith2@gmail.com | telephone: +1 (806) 440-2215 | portfolio: samvillasmith.com | GitHub: https://github.com/samvillasmith | LinkedIn: linkedin.com/in/samuel-villa-smith-mbaa803a0109

**Summary**

Data-driven PhD student in Information Technology with a focus on AI, Machine Learning, and Natural Language Processing (NLP). Experienced Senior Software Engineer with a strong background in cloud-native applications, Agile methodologies, and driving product strategy. AWS Solutions Architect certified, with a Master of Business Administration. Passionate about leveraging technical expertise and business acumen to deliver innovative data-driven solutions.

**Education**

**Doctor of Philosophy (PhD) in Information** **Technology** (Expected 2026) - University of the Cumberlands, 2021-Present **Master of Business Administration (MBA)** - Liberty University, 2019

**Bachelor of Science (B.S) in Interdisciplinary Studies - Business Administration & Criminal Justice** - Liberty University, 2016

**Skills**

* **Data Analysis Skills:** Advanced Analytics • Data Visualization (Matplotlib, Seaborn) • Data Mining • Business Intelligence • Statistical Data Analysis • Statistics
* **Programming Languages:** Python • Java • TypeScript
* Web Development: React • Next.js • Node.js
* **Cloud & Deployment:** AWS Cloud Services (certified AWS Solutions Architect) • Serverless Architectures • Microservices • REST APIs
* **Database Management:** SQL (experience in Data Analysis with SQL)
* **Machine Learning/NLP:** Scikit-learn • Natural Language Processing

**Experience**

**PhD Student in Information Technology**, University of the Cumberlands Aug 2021 - Present, Williamsburg, KY (Remote, Full-Time with Flexibility)

* Conducts research focused on Data Science and NLP, exploring innovative ways to enhance data interpretability and integrate ethical AI practices while maintaining a perfect 4.0 GPA.
* Leads data-centric projects using advanced analytics and visualization techniques, uncovering actionable insights from complex data sets.
* Engaged in rigorous coursework including inferential statistics, data mining, business intelligence, and cloud computing, applying theoretical knowledge to practical challenges.

**Senior Software Engineer, Oasis Technology & Engineering** **(Astrion)** August 2020 - April 2024, San Antonio, TX (Remote)

* Spearheaded the development and modernization of cloud-native mobile and web applications for a major government client, significantly reducing technical debt and expenses.
* 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, deliver business value, and improve efficiency using Agile methodologies.
* Conducted data analysis using modern tools to provide insights and recommendations for architectural, policy, and process improvements.
* Contributed to the transformation of business goals and end-user needs into product strategy.
* Participated in software vendor selection, program decision support, and MVP development while leading major engineering efforts.
* Mentored junior and mid-level personnel, providing technical guidance, and ensuring project quality, security, and compliance requirements were met.

**Freelance Software Engineer and Technical Product Manager**, Masada Systems June 2016 - February 2022, Amarillo, TX and Be'Er Sheva, Israel (Remote)

* Directed a significant digital transformation for a nonprofit, enhancing IT alignment and efficiency through the launch of a web app ahead of schedule.
* Managed Agile cross-functional teams, seamlessly turning business goals into actionable product plans and strategies that enhanced overall product value.
* Led a major data migration effort involving a well-known CRM to overhaul the organization’s data management systems, thereby improving security.

**Selected Projects**

***Motor Vehicle Collisions and Crashes Analysis***, May 2024

* Conducted a detailed analysis of NYC motor vehicle collision data using Python, Pandas, Matplotlib, Seaborn, and Scikit-learn to uncover traffic accident trends and develop a predictive model for injuries.

***Unveiling Patterns of Crime in Los Angeles,*** May 2024

* Analyzed a comprehensive dataset of crime incidents in Los Angeles from 2020 to 2023 using Python and data analysis techniques, exploring temporal, demographic, and spatial patterns to inform law enforcement strategies and public safety initiatives.

***Mobile App Store Analysis***, Apr 2024

* Explored mobile app user engagement using vanilla Python, parsing and examining over 17,000 data points across Apple App Store and Google Play to unearth patterns in app usage, ratings, and revenue generation.

**Certifications**

**AWS Solutions Architect - Associate**, Amazon Web Services, Jul 2022-Jul 2025

**Security+, CompTIA**, Apr 2019-Apr 2025