

Arturo Villalobos Jr

artuvillam@gmail.com | 432-312-5912 | linkedin.com/in/rtvro | github.com/arturovilla | rtvro.dev

Summary

Senior Software Engineer with **5+ years** building production systems with Java, Python, Azure, and SQL. Experienced delivering secure, compliance-heavy software for defense customers and owning projects end-to-end from requirements through deployment.

Skills and Certifications

Languages: Java, Python 3+, C#, JavaScript, PHP, C++, HTML/CSS **Data/DB:** MSSQL, MongoDB, Redis **Cloud/DevOps:** Azure, AWS, Docker, Ansible, Azure DevOps **Tools:** Jira, Teams, Slack, VS Code, JetBrains, Xcode **Spoken:** English (Native), Spanish (Native), Portuguese (Beginner)

Work Experience

Senior Software Engineer, Standard Data, Inc. Aug 2023 – Present
Houston, TX

- Reduced the time soldiers and airmen spent preparing readiness reports by 40% in airbases across the United States through developing micro-services with Java Spring Boot, TypeScript, MongoDB, and Microsoft SQL Server. These services provided machine learning driven maintenance calculations that power a suite of tools automating critical operational tasks.
- Led CI/CD initiatives with Azure Pipelines, Ansible, and Docker to automate and integrate front-end and back-end deployments, accelerating prototype delivery. This speed enabled more detailed RFI responses to GSA schedule notices and facilitated faster client feedback.
- Developed and maintained a data synchronization tool using C#, Ansible, and Docker to securely ingest hundreds of gigabytes of sensitive customer data. This tool ensured up-to-date application data for live demonstrations and drove greater customer adoption.
- Adapted quickly to organizational needs by learning Java to support a major architectural shift. Partnered with two backend engineers to transition from a micro-services stack (Python, Redis, MongoDB, Java) to a monolithic design, delivering a beta in three months and live-user testing in six.
- Authored the organization's System Security Plan (SSP) and led the end-to-end effort to achieve CMMC Level 1 compliance in one month, coordinating stakeholders, implementing required practices, and assembling audit-ready evidence.
- Served as a customer-facing, on-site engineer, deploying and demonstrating software to senior military stakeholders (including generals), providing operational support, and delivering new features in parallel.
- Engineered PHP micro-services and migrated backend storage from MongoDB to Elasticsearch, boosting time-series query performance and retaining full data resolution. The redesign reduced infrastructure costs by \$50,000 per year.

Software Developer, Classic Canvas Company Feb 2023 – June 2023
San Antonio, TX

- Increased the efficiency of current customer outreach efforts by automating email marketing and creating a tool that can schedule and automatically post social media content.
- Deployed and configured a self-hosted accounting, invoicing, and expenses platform using Docker and PostgreSQL, with custom features such as company-specific branding, data views, and reporting. The solution eliminated QuickBooks subscriptions, saving over \$4,000 annually.

Cloud Solutions Architect Internship, University Lands May 2020 – Aug 2020
Houston, TX

- Automated ETL workflows for Drilling and Completion reports in the Permian Basin by developing server-less Python Lambda functions on AWS. The solution streamlined integration of critical oil well data and saved engineers significant time previously spent on manual data entry.
- Collaborated with mechanical and petroleum engineers to design Python notebook templates that streamlined type curve creation and well cost analysis, improving data-driven decision-making and accelerating engineering and financial evaluations.

Peer Teacher, Texas A&M College of Engineering Aug 2020 – Dec 2021
College Station, TX

- Supported 70+ undergraduate and graduate students through weekly in-person/virtual office hours, while assisting instruction across five courses (Data Structures & Algorithms, Introduction to Computing, Computer Organization, Discrete Mathematics, and Linear Algebra) by reviewing materials and grading assignments.

Education

Texas A&M University College Station, TX
Bachelor of Arts Computer Science Graduated Dec 2022
Minor in Statistics

Projects

Creative Developer, Art Club Dec 2024 – Present
Houston, TX

- Created immersive real-time 3D installations with TouchDesigner, Blender, and mathematical modeling, enhancing weekly live shows and permanent exhibits experienced by over 300 patrons per day.
- Maintain and repair over dozen high-performance servers powering real-time visualizations and gallery-wide installations, ensuring reliability and minimal downtime.