

Arturo Villalobos Jr

artuvillam@gmail.com | 432-312-5912 | <https://www.linkedin.com/in/rtvro/> | <https://github.com/arturovilla> | <https://www.rtvro.dev>

SKILLS AND CERTIFICATIONS

- Java, Python 3+, C#, Javascript, HTML/CSS, Php, Rstats, C++.
- MSSQL/SQL, MongoDB, Redis, AWS/Azure, Docker, Ansible.
- Platforms and Tools: Teams, Slack, Jira, Azure DevOps, VScode, Xcode, JetBrains Products
- Languages: English-Native, Spanish-Native, Portuguese-Beginner

WORK EXPERIENCE

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

- Develop and deploy micro-services using Java Spring Boot, TypeScript, MongoDB, and Microsoft SQL Server to deliver machine learning-driven maintenance calculations, ensuring seamless integration across military and industrial systems with diverse performance and scalability requirements.
- Lead CI/CD implementation using Azure Pipelines, Ansible, and Docker to automate and integrate front-end and back-end deployments, streamlining project delivery.
- Partner with project stakeholders to define requirements, conduct demonstrations, and deploy live versions of projects to various customers nationwide, ensuring alignment with strategic objectives and operational readiness.
- Develop and maintain a critical deployment and data synchronization tool using C#, Ansible, and Docker, essential for live demonstrations and ensuring up-to-date application data, driving greater customer adoption.
- Adapt quickly to organizational needs: originally hired as a Python developer, learn Java to support a major architectural shift; collaborate as one of three backend engineers to transition from micro-services (Python, Redis, MongoDB, Java) to a monolithic design, successfully delivering a beta test within six months.
- Develop PHP micro-services for an automotive sensor manufacturer and re-architect the backend to transition from MongoDB to Elastic-search, centralizing data storage and optimizing time-series query performance.

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

- Developed internal automation tools and a web interface using React, Python, and AWS to boost social media presence and activity. These tools will streamline marketing efforts, allowing for increased engagement and reach without the need for additional marketing resources.
- Created and delivered comprehensive documentation detailing the tools used, specific system design decisions, and other relevant information. This documentation will serve as a valuable resource for current and future team members, ensuring transparency, consistency, and ease of knowledge transfer within the organization.

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

- Developed server-less Lambda functions in Python on the AWS cloud to automate the ETL (Extract, Transform, Load) processes for data from Drilling and Completion reports in the Permian Basin. This solution enhances data processing efficiency, scalability, and accuracy, streamlining the integration of critical oil well data into the system.
- Designed and developed a cloud architecture utilized by chemical and mechanical engineers to construct type curves and facilitate cost analysis of current wells. This architecture supports advanced data analysis and decision-making processes, enhancing the efficiency and accuracy of engineering evaluations and financial assessments.

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

- Tutored undergraduate and graduate students enrolled in Computer Science and Engineering courses, providing guidance and support both remotely and in-person. This includes helping students understand complex concepts, improve their problem-solving skills, and succeed academically through personalized instruction and mentorship.
- Taught courses including Data Structures and Algorithms, Introduction to Computing, Computer Organization, Discrete Mathematics, and Linear Algebra under the supervision of a professor. This involved preparing lectures, grading assignments, and offering individualized support to enhance students' understanding and performance in these subjects.

EDUCATION

Texas A&M University

Bachelor of Arts Computer Science
Minor in Statistics

College Station, TX

Graduated Dec 2022

PROJECTS

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

- Design and build custom real-time 3D art installations for music artists, leveraging TouchDesigner, Blender, and advanced mathematical techniques to deliver dynamic visuals for weekly live performances. These interactive visual systems enhance audience engagement and adapt seamlessly to diverse performance environments.
- Maintain and repair high-performance servers powering real-time visualizations and gallery-wide installations, ensuring reliability and minimal downtime.