>>ARMANDO OCTAVIO MÁRQUEZ ARROYO

I SOFTWARE DEVELOPER

| DATA SCIENTIST

| ML ENGINEER



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\$AQUILA

Experienced Software Developer (10+ yrs) focused on Full Stack Development, AI/ML, and cloud-native solutions (AWS / Azure). Led AI assistant library development at Nestlé (RAG), Led the development of the Payment Gateway module in TV Azteca and boosted average invoice payment time for 60%+.

Certified with a Post Graduate Program in Artificial Intelligence and Machine Learning for Business Applications (The University of Texas at Austin), exploring Blockchain, IoT, and Quantum Computing.

Building my own crypto: \$AQUILA

PROFESSIONAL EXPERIENCE

| Data Analytics | Data Engineer

|| US & BRAZIL | [JANUARY 2025 - PRESENT]

||| As a data engineer, I built to the development of internal libraries for the sales department using Python as the main language, focusing on scalable systems that supported Delta Tracking, Document Ingestion, ETL, Vector Enhancement, etc. I implemented multiple microservices built on RAG architecture to enhance the data infrastructure and improve updated access to contextual knowledge across the US and Brazil sale departments.

TV AZTECA

| Fullstack Development | Tech Lead || MÉXICO | [JANUARY 2024 - MAY 2025]

||| As a Full-Stack Developer at TV AZTECA, we migrated the internal system of the TV giant. During the Domain Driven Designed project we developed and deployed the Billing and Collections module, a Microservice which used an Event Based pattern with Python, Typescript, Kafka, PostgreSQL and AWS Services, later on i lead a group of developers and delivered the Payment Gateway module, a Serverless/CQRS Microservice based on Hexagonal architecture pattern which reduced average invoice payment time by over 40% percent.

SODEXO

| Fullstack Development

|| MÉXICO - [FEBRUARY 2023 - JANUARY 2024]

||| As a Full-Stack Developer at Sodexo, we built a web application providing employee benefits for companies. Our project used Typescript for the Front End and Java for the backend on a monolithic architecture. We developed and integrated APIs, implemented biometric validation and a payment system delivering a robust and user-friendly platform. Additionally, we employed tools like Azure and Docker to streamline deployment and ensure a scalable, efficient development environment.

⊕ GRUPO ECO

| Fullstack Development | Server admin

|| MÉXICO - [2019 - 2023]

||| Web administration and maintenance for all the Entretenimiento ECO Group which comprises over 25 sites. Developed over 15+ applications, plus +10 internal services for the group mostly with Python and React, Administer Linux-based webhost, domains and hosting services management, SSL certificates and program updates to prevent downtime. Support maintenance and creation of new server instances, Database maintenance and table creations. Assist users with access requests. Logging/Reports & Debugging. Add / Remove Users (RBCA/ACL)

FREELANCE & CONTRACT WORK

| Fullstack Development

|| +10 Years Experience

||| Developed a variety of websites and applications for clients across industries, including music labels, production companies, boutique hotels, e-commerce, marketing, and talent agencies. Delivered custom solutions ranging from portfolios and virtual tours to booking systems and online stores.

SKILLS

- ⊕ OS: MacOS, Linux
- Programming Languages:JavaScript, TypeScript, Python, Java Licentiate degree Computer Software Engineering
- Front End: React JS + Redux [Thunk/Saga], Next JS
- Back End: Node.js, Express, GraphQL, Python,

Java (Spring Boot), FastAPI

- Event-Driven Architecture: Kafka, Protobuf
- UI: Material UI, Bootstrap, Tailwind CSS
- Databases: PostgreSQL, MongoDB, DynamoDb,

Firebase/Firestore, Pinecone, Databricks

⊕ Cloud & DevOps: GitHub, AWS: [EC2, S3, CodeCommit, CodeArtifact, CodePipeline, CodeBuild, System Manager, SageMaker, Lambda, DynamoDB, API Gateway, Route53,

CloudFront] Docker, Azure, Kubernetes, MS Graph, Terraform

- Testing: Jest, pytest, Cypress Js
- ⊕ Management: SCRUM, Jira, ClickUp
- ⊕ Tools: VS Code, Intellij, Firefox's DevTools
- Data Science: NumPy, Pandas, Matplotlib, Seaborn
- ML: Scikit-Learn, XGBoost, Imbalanced-learn
- NLP: Word2Vec, NER
- © CV: OpenCV, PyTorch, TensorFlow/Keras
- Generative AI: Hugging Face Diffusers, OpenAI Gym
- Data Engineering | ETL/ELT: unstructured.io,

Azure Document Intelligence, Airbyte

Data serialization: JSON, YAML, XML

EDUCATION

- Universidad Autónoma de Nuevo León
- [2004 2008]
- HarvardX: CS50x | Computer Science | [2023]
- The University of Texas at Austin Postgraduate Degree Artificial Intelligence and Machine Learning: Business Applications | [2024]
- | LANGUAGES
- ⊕ SPANISH 100% | ENGLISH 100%