JOHAN ZULUAGA

Backend & Data Developer (AWS) | Certified Full-Stack MERN Developer

San Luis, Antioquia, Colombia | johan16zulu@gmail.com | 3027742742 | LinkedIn | GitHub

PROFESSIONAL PROFILE

A results-oriented developer with over 3 years of hands-on experience developing and maintaining data pipelines and serverless infrastructure on AWS (Lambda, S3, SQS, CloudWatch) for a data and visualization startup in the property management sector. With a solid foundation in Python and debugging production systems, I specialize in diagnosing and resolving complex errors using an evidence-first approach. Certified as a MERN (MongoDB, Express, React, Node.js) Full-Stack Developer, with hands-on experience applying the stack to web and mobile products. Known for being self-taught and a problem-solver, I am currently pursuing the AWS Certified Data Engineer – Associate certification to deepen my expertise in data engineering.

TECHNICAL SKILLS

Programming Languages | JavaScript/TypeScript, Python, SQL
Backend & Data | Node.js/Express, MongoDB, REST APIs, ETL, Data Pipelines
Cloud (AWS) | Lambda, S3, SQS, API Gateway, EventBridge, Secrets Manager, RDS/MySQL, Docker/ECR, Serverless Framework
Automation & AI | Puppeteer, advanced web scraping, LLM integration (Google Gemini), OCR
Mobile & Frontend | React, React Native, Astro, Android Studio
Tools | Burp Suite, DBeaver, Bruno/Postman, Git
Languages | Spanish (native), English (A2 + technical reading of documentation)

EXPERIENCE

Backend & Data Developer — 2023 – 2026
AssetMinder — *Houston, TX (remote)*

- **Data Engineering and Serverless Architecture (AWS):** Lead developer on 5 backend services with over 600 commits, extracting and consolidating financial and operational data from 4 property management portals without comprehensive public APIs (ResMan, RealPage, Entrata, AppFolio).
  - Built the pmcs-entrata service from scratch: authenticated scraping, integration with RDS/MySQL and S3, and a pipeline of ~8 business reports (financial, operational, traffic, vacancies, EOM).
  - Migrated pmcs_appfolio from Lambda to a container image in ECR in stages; implemented an AWS WAF bypass and 2FA authentication via Keycloak.
- **Production Resilience:** Designed retry mechanisms with backoff across more than 10 scraping endpoints, timeout guards, and automatic rotation of S3 credentials every 28 days, reducing failures caused by instability in the source portals.

Full Stack Developer — 2023 – Present
Freelancer — *Colombia (remote)*

- **Lance**: Multi-store e-commerce platform with an admin panel, using the full MERN stack and React Native for the mobile version.
- **Minga**: A platform for creating, publishing, and managing manga, with a backend built on Node.js/Express/MongoDB and a mobile app built with React Native.
- **FastManage**: Self-hosted POS system (Astro, React 19, Prisma/PostgreSQL, offline PWA) with ESC/POS thermal printing and integration with **Google Gemini** for dashboard alerts and invoice OCR; resolved a cookie security bug in production and designed the inventory control (kardex) system with atomic transactions.
- **Aurora Finance**: A personal finance app (Expo/React Native, Supabase) for managing income, expenses, accounts, loans, and savings goals, featuring a conversational assistant powered by **Google Gemini** that responds based on the user's actual data and suggests changes only with explicit confirmation.
- **AuroraPlay**: A streaming client (Astro, React 19, PWA, Supabase) that aggregates 5 content sources under a single interface; designed the **scraping backend in Python** (BeautifulSoup/lxml, Dockerized) with an extensible multi-source architecture and a shared layer for TTL caching and retries.

EDUCATION

Technology in Video Game Development and Interactive Environments
SENA, Colombia, *In Progress*

Certificate in Programming Skills with an Emphasis on Mobile Applications — Misión TIC 2022
University of Caldas / MinTIC, Manizales, Colombia, *May 2021 – Dec 2021 (800 h)*

MERN Full-Stack Developer
MindHub, Colombia, *Jan 2023 – Apr 2023*

CERTIFICATIONS AND COURSES

- Microsoft Certified: Azure Fundamentals (AZ-900) — Microsoft, July 2022.
- Certificate in Maker Tools for Local Development — Coredi Technological Institute / Alianza Oriente Sostenible (EU), 140 h, Oct 2025.
- MERN Full-Stack Developer — MindHub (credential verified on Credly).
- Designing Innovative and Creative Websites — Domestika, May 2023.
- AWS Certified Data Engineer - Associate — currently pursuing certification.