Daniel Garcia Araque

Senior Software Engineer | Software Architect

Bogota, Colombia

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SUMMARY

Software Engineer with 6+ years of professional experience designing and building production-grade B2B platforms with emphasis on scalable architecture, data integrity, and system reliability. Currently Full Stack Developer at Unión Agencia de Seguros, delivering 10+ production insurance tech systems. Previously 5 years at Quantum Software and Marketing building 20+ client projects across industries. Proven expertise in multi-site IoT infrastructure and cloud-native solutions using AWS. Strong advocate for documentation-driven development, modular design patterns, and long-term maintainability.

SKILLS

Architecture: Domain-Driven Design, Multi-tier Systems, API-first Design, Technical Documentation, ADRs
Backend: Python, FastAPI, Pydantic, SQLAlchemy, Node.js, Express.js, REST APIs, WebSocket, MQTT
Frontend: React, TypeScript, JavaScript, HTML/CSS
Desktop/Mobile: PyQt6, ReportLab, PyInstaller, Android (Java/Kotlin), Bluetooth/BLE
Data: PostgreSQL, DynamoDB, Pandas, ETL Pipelines, Excel Automation (openpyxl)
DevOps: Docker, AWS (IoT Core, Kinesis, CloudFormation), GitHub Actions, LocalStack
Security: X.509 Certificates, mTLS, TLS 1.3, VPN IPsec
Testing: pytest, mypy, 90%+ Test Coverage

EXPERIENCE

Full Stack Developer   January 2025 – Present
Unión Agencia de Seguros   *Bogota, Colombia*

- Developed Insurance Document Automation System (PyQt6 desktop app) with PDF generation, DIAN NIT validation, deployed as standalone .exe reducing document generation from hours to seconds
- Built Conciliator Softseguros Celer: reconciliation platform processing 50,000+ records with 100% data integrity, 3-tier matching logic, and 90%+ test coverage
- Created Insurance Production Dashboard for Excel (.xlsb) report processing with multi-criteria filtering
- Designed Data Migration Platform with DIAN API integration for batch NIT validation of thousands of records

Web Developer   February 2020 – January 2025
Quantum Software and Marketing   *Bogota, Colombia*

- Delivered 20+ production websites and applications across healthcare, retail, hospitality, and manufacturing industries
- Implemented React frontends with Node.js backends; managed full project lifecycle from requirements to deployment
- Built WhatsApp quotation bot for Acrildental (healthcare), business platforms for manufacturing and hospitality clients
- Established long-term client relationships with repeat engagements (Mantra Coworking: 3 versions, CH Beauty: 2 versions)

Bilingual Customer Service Specialist   October 2019 – December 2019
Concentrix Customer Services Colombia SAS   *Bogota, Colombia*

- Provided bilingual (Spanish/English) customer service for Macy's Credit, developing stakeholder communication skills

PROJECTS

IoT Agriculture Platform – Multi-site smart farming infrastructure for 8 distributed sites
Designed three-tier architecture (Edge + Cloud + Frontend) integrating 8,176 sensors, 2,024 RFID readers. Implemented IP addressing for 65,536 addresses, 48 VLANs, MQTT over TLS. Achieved 98.5% uptime with <100ms latency.
Tech: Python, FastAPI, React, PostgreSQL, AWS IoT Core, MQTT, LoRaWAN, Docker

AWS IoT Healthcare Monitoring – Vital signs monitoring with real-time anomaly detection
Built event-driven pipeline (MQTT → IoT Core → Kinesis → Lambda → DynamoDB). Processed 5,247 messages with 0% packet loss, 115ms avg latency, detected 541 anomalies (10.3%) with real-time alerting.
Tech: Python, AWS IoT Core, Kinesis, DynamoDB, X.509 Certificates, LocalStack

PID Control System with Full-Stack Integration – Industrial temperature control with REST API
Built three-tier system: ESP32 firmware, Node.js/Express API with PostgreSQL, and real-time WebSocket dashboard. Achieved ±1°C accuracy, <30s response time, handles 86,400+ daily sensor readings.
Tech: Node.js, Express.js, PostgreSQL, WebSocket, C++ (Arduino), ESP32-S3

EDUCATION

Mechatronics Engineering   Expected Graduation: 2027
Universidad Militar Nueva Granada, Bogota, Colombia   Currently Enrolled

CERTIFICATIONS

Misión TIC 2022 – Web Applications Development   December 2021
MinTIC (Ministry of ICT) & Universidad Pontificia Bolivariana | 800 hours | Credential ID: 1000718485

LANGUAGES

Spanish (Native) | English (C1 Advanced – Professional Working Proficiency)