Nestor Garcia

Software Engineer

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LinkedIn | Portfolio | GitHub

SUMMARY

Software engineer with five years of experience in manufacturing software and financial data integrations. Led a quotation redesign using React and Django and built Node.js and FastAPI services. Also built AI assistants and data pipelines and operated workloads on Azure, AWS and Kubernetes.

PROFESSIONAL EXPERIENCE

RADII MANUFACTURING **Remote | Querétaro, Mexico**
Software Engineer **Jan 2025 - Present**

- Led the redesign of an existing manufacturing quotation feature using React, TypeScript, Django REST Framework, and PostgreSQL. Defined requirements with Operations, designed the interface, APIs, and database schema, and implemented most of the changes. Assigned tasks and reviewed the team's work.
- Built a manufacturing AI assistant with LangChain/LangGraph, Azure OpenAI and PostgreSQL/pgvector for technical retrieval and quotation actions, with permissions, validation and confirmation before changes.
- Developed ML cost prediction using PyTorch geometry features, XGBoost and scikit-learn; exposed FastAPI inference and evaluated MAE, RMSE and unusual cases against the previous deterministic pricing approach.
- Independently built the Node.js LogoDetection worker for OCR/LLM PDF redaction; deployed through GitHub Actions and AWS ECR/ECS, with CloudWatch monitoring and manual output evaluation.
- Independently built a LangGraph PPAP workflow used by operations; estimated complete-report preparation fell from a working day to five minutes or less.
- Built FastAPI-based asynchronous CAD processing with Azure Service Bus and Container Apps, supporting up to 35 concurrent jobs per worker replica.
- Built Databricks ETL using real manufacturing data, PySpark, Spark SQL and bronze/silver/gold Delta tables; added quality checks, scheduled jobs, monitoring and operational dashboards.
- Built GitHub Actions CI/CD for tests, linting, Docker builds and Azure releases; provisioned resources, managed production Kubernetes with Terraform/Grafana and secured S3 permissions and expiring links.
- Normalized PostgreSQL quotation/order relationships with staged migrations and backfills; used Scout APM to fix N+1 queries, reducing Orders loading from about five seconds to one.

ATHENA SYSTEMS | FINTECH **Remote | New York, NY**
Software Engineer **Oct 2023 - Jan 2025**

- Owned financial-data implementations from provider requirements through historical and daily loads using Python, PowerShell, SQL Server, XML mappings, FIX and CSV over FTP/SFTP.
- Built SQL Server stored procedures, views and functions for reconciliation; transformed and validated 10,000+ transaction records and investigated missing activity, duplicates and account discrepancies.
- Traced a doubled account total to an unannounced provider CSV summary row; corrected record-filtering rules and delivered a client postmortem explaining the cause and fix.
- Built an internal Flask/ORM interface to simplify repetitive database operations; used Bloomberg Terminal/Desktop API to investigate missing identifiers and price data.
- Worked directly with clients and providers in English and mentored junior engineers. Promoted from support to software engineering responsibilities within approximately three months.

FORT GROUP **Mexico**
Full Stack Developer / Data Analyst **Oct 2021 - Sep 2023**

- Built Laravel/Livewire applications with PHP, JavaScript and MySQL for fleet, maintenance, invoicing, users, role-based permissions and tournament workflows.
- Gathered operational requirements, designed relational models and maintained Python/SQL ETL and reporting workflows with Excel and Power BI dashboards.

TECHNICAL SKILLS

Languages and frontend: Python, SQL, JavaScript, TypeScript, React, Next.js, Three.js

Backend and integration: Node.js, Django/DRF, FastAPI, Flask, REST APIs, Postman, ETL, XML, FIX, FTP/SFTP

Databases and analytics: PostgreSQL, SQL Server, MySQL, Databricks, PySpark, Spark SQL, Delta Lake, Power BI

AI and machine learning: LangChain, LangGraph, Azure OpenAI, Microsoft Foundry, Document Intelligence, pgvector/RAG, PyTorch, XGBoost, scikit-learn, MLflow

Azure: AKS, Container Apps, Service Bus, Blob Storage, ACR, App Service, Azure SQL Database, Key Vault, Application Insights, identities/roles

AWS and delivery: S3, ECR, ECS, CloudWatch, Docker, Kubernetes, Terraform, GitHub Actions, Grafana

Development tools: Git, GitHub, Jira, Linear, Codex, Claude Code, custom skills, test design, code review, task coordination and mentoring

SELECTED PERSONAL PROJECTS

AI Video Production Factory | GitHub

Python, React, TypeScript, Google Cloud (GCP), Gemini, ElevenLabs, Remotion, FFmpeg

- Built a research-to-video workflow using Google Cloud and Gemini for AI processing, with narration, Remotion rendering and FFmpeg assembly. Added checkpoints, retries, validation feedback and cost tracking.

Job Autofill and Tracker | GitHub

React, TypeScript, WXT, IndexedDB, OpenAI

- Built a local-first browser extension for application tracking, reusable answers and user-triggered autofill across different applicant systems, with optional AI drafting.

YouTube Outlier Research Platform | GitHub

Next.js, React, TypeScript, Prisma, SQLite, YouTube API, Gemini

- Built evidence-based video research with versioned recent-median metrics, comparison windows and sample sizes. Reports insufficient data instead of inventing a score.

EDUCATION AND LANGUAGES

Industrial Engineering
Instituto Tecnológico de Ciudad Madero | 2019 - 2023

Software Engineering
Instituto Tecnológico de Ciudad Madero | 2017 - 2019

Spanish: native | English: advanced professional proficiency