DANIEL CHAVEZ

AI Engineer | Software Developer | Petroleum Eng.

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LinkedIn: https://www.linkedin.com/in/daniel-chavez-engineer-developer/
Portfolio: https://portfolio-danielchavezs-projects.vercel.app/

STACK & SKILLS:

AI & Machine Learning: Agents, Automations, Embeddings, Semantic Search, Retreival-Augmented Generation (RAG), Generative AI Integration, Chatbot Development, Fine-Tuning Validation, Vector Databases.

Databases: PostgreSQL, MongoDB, Supabase, Qdrant, Prisma, Mongoose, Sequelize.

Backend: JavaScript, TypeScript, Node.js, Express.js, Python, FastAPI.

Frontend: React, Vite, Next.js, Redux, HTML5, CSS, Tailwind CSS.

Tools & Methodologies: Git, Vercel, Render, Jest, Notion, Trello, RESTful APIs.

ACADEMIC FORMATION:

Project Management Diploma
Politécnico de Colombia
Medellín, 2025

Full-Stack Developer
Henry Bootcamp
Bogotá, 2023

Petroleum Engineer
Universidad de América
Bogotá, 2018

LANGUAGES:

English: C2 – Proficient.
French: A2 – Beginner.
Spanish: Native.

HIGHLIGHTS:

Meritorious Degree Work
Fundación Universidad de América
Bogotá, 2018

SABER PRO – National Tests for Higher Education Graduates:

• Above 98% of the national level.
• Above 97% of the engineering group.
Bogotá, 2017

SABER XI – National State Exams for High School Graduates:
2nd Place (Out of groups of 1000)
Bogotá, 2012.

PROFILE

Bilingual (English–Spanish) Software Developer and Petroleum Engineer, with 4 years of experience in the Oil & Gas industry, a Project Management Diploma, and additional specific experience building AI-driven systems. I select the most appropriate tools based on each project's needs—from Python with FastAPI to JavaScript/TypeScript frameworks for backend and frontend—aiming to deliver solutions that are flexible, efficient, and maintainable.

In my most recent experience in AI engineering, I have focused primarily on developing diverse types of systems, implementing semantic search, RAG pipelines, LLM-powered generative responses, chatbots, knowledge extraction from datasets, and automation workflows. Throughout this process, identifying client needs and contextual constraints and translating them into concrete, scalable, and effective solutions has been the skill I have strengthened and valued the most in recent times.

On the frontend, I typically work with React, Next.js, and Tailwind, implementing SSR, CSR, SSG, or ISR depending on the specific requirements of each project.

Drawing on my engineering background and management training, I adapt quickly to new challenges, communicate clearly with stakeholders, and continually refine solutions to align technical designs with business objectives. English Level: C2.

PROJECTS

DroidForce – June 2025 to Present

Key developer for DroidForce, an AI-driven support platform used by an enterprise client in Europe. I helped design and implement a three-stage system that begins with a domain-specific knowledge base and RAG-style assistant built over internal documentation, historical tickets and expert know-how; evolves into human-in-the-loop automations for tasks such as ticket summarization, classification and closure; and, once quality thresholds are met, promotes those workflows to fully autonomous policies. The solution combines LLMs, retrieval pipelines and agentic orchestration to streamline support operations, achieving around 95% response accuracy, 66% faster resolution times and 24/7 coverage, while freeing the support team to focus on complex, high-value cases. I contributed across the stack, from API and vector search design to workflow rules and iterative refinements based on user feedback.

Verify Influencers – January to February 2025

A full-stack web app built with Next.js 15, Tailwind CSS, and MongoDB to analyze and rank health influencers using AI-powered credibility assessments. It combines SSR for SEO and performance with CSR for interactivity, uses Perplexity API for extracting and structuring claims, and relies on a Mongoose backend with advanced filtering and sorting. Streaming, Server Actions, and React Suspense enhance data handling and responsiveness.

URL: https://verify-influencers-alpha.vercel.app/

Owen Partners – November 2024
Collaborated with an Australian financial advisory firm to enhance selected website's UI components and optimize its responsive design. Built on WordPress, the project also included integrating Calendly to streamline client meeting scheduling. URL: https://owenpartners.com.au/

Other personal projects: For additional information on these projects, please visit my portfolio (see header).

- Task Manager (December 2024): https://task-manager-eta-opal.vercel.app/
- Promotional Sweepstake (October 2024): https://sorteo-one.vercel.app/
- Invoice Dashboard (March 2024): https://nextjs-dashboard-htg7.vercel.app/dashboard
- Greencall (September 2024): https://greencall.vercel.app/
- Mortgage Calculator (July 2024): https://mortage-calculator-swart.vercel.app/
- Stafy (August to October 2023): https://stayfy-mu.vercel.app/

EXPERIENCE

Jr. Full-Stack Developer for AI Projects
Mankind Technology | March 2025 – Present

- Engineered end-to-end AI pipelines with Python/FastAPI, including embedding-based search, RAG workflows, prompt orchestration, and vector DB operations (Qdrant) for production-grade semantic retrieval and automation.
- Developed agentic automation systems with SLA-aware bots, approval flows, tool-calling logic, and multi-step reasoning—driving major accuracy and resolution-time improvements for enterprise support environments.
- Integrated generative AI capabilities into internal and client-facing applications, and evaluated fine-tuning configurations (models, temperatures, datasets) to strengthen domain adaptation and output consistency.
- Built and maintained frontend features using Next.js/React (SSR/CSR), TypeScript, authentication flows, Supabase storage, PDF generation, and responsive interfaces; collaborated directly with client teams on solution design and technical planning.

Audit Consultant
TF Auditores y Asesores Ltda. BIC | July 2023 - January 2024

- Conducted joint audits for Oleoducto de Colombia S.A.'s Infrastructure Project Management, evaluating compliance with PMBOK V6 in monitoring, control, and closure stages.
- Performed external audits on Pipeline Integrity Management Cycles (ODL and OBC systems), assessing processes based on API 1160 and NTC 5901 standards, risk levels, integrity plans and their implementation.

Junior Support Engineer
Oleoducto Central S.A. Ocensa / NRE SAS / PS International SAS | September 2021 – May 2023

- Created and maintained technical documentation for Maintenance, Integrity, and Onshore/Offshore Operations.
- Enhanced Ocensa's qualified personnel program by reviewing and updating training materials and evaluations. Analyzed RCA reports to identify key events and recommend preventive and corrective measures related to qualified tasks.

Other Professional Experience:

- **Professional I Petroleum Engineer:** Oleoducto Central S.A. Ocensa / NRE SAS | May – September 2019
- **Final Degree Project / Placement:** Ulterra Colombia | May 2017 – July 2018

COURSES AND CERTIFICATES

Cybersecurity Fundamentals
Palo Alto Networks Academy. January 2026

Energy Principles and Renewable Energy.
University of Queensland. September – December 2020.

Python Essentials 1 & 2
Cisco Networking Academy. March - April 2025

Unconventional Reservoir Geomechanics Course.
Stanford University. April - June 2019.

C2 – Proficient English Level.
EF English Standard Test. October 2023.

Reservoir Geomechanics Course.
Stanford University. April - June 2019