

Daniel Gutiérrez

Software Architect & Senior Engineer

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Software architect and senior engineer with over 10 years of full-stack and cloud experience across fintech, healthcare, retail point-of-sale, and digital media. Builds and architects systems end to end, from front-end through backend, data, ML, and LLM-powered agentic workflows (RAG, tool calling), taking greenfield products and complex problems from design to production. Has led teams as a tech lead and architect. Holds an MSc in Data Science, with a strong background in AWS and distributed systems.

[LinkedIn](#) [dgutierrezc](#) [GitHub](#) [dgutierrez1](#)

SKILLS

AI / LLM	LLM integration, RAG, Tool calling, Prompt engineering, Anthropic SDK, Vercel AI SDK
DATA/ML	Machine Learning, MLOps, Data Engineering, Apache Spark, Apache Airflow, Snowflake, TensorFlow, Keras, Pandas, ABSmartly, Databricks, Supervised Learning, scikit-learn, Tensorflow.js, R
CLOUD/DEVOPS	AWS CDK, Amazon EKS, AWS Fargate, AWS Kinesis, AWS Lambda, AWS SAM, AWS API Gateway, AWS AppSync, GitHub Actions, Docker Compose, Docker, AWS S3, AWS SNS, AWS SQS, AWS CloudWatch, AWS IAM, AWS KMS, AWS IoT Core, CircleCI, Firebase Functions, Feature Flags, Vercel
BACK-END	Node.js, NestJS, GraphQL, Python, FastAPI, Django, Express.js, SQL, Flask, Firebase, Apollo Server, REST, SignalR, Supabase, PHP, Ruby
FRONT-END	React, Next.js, Redux, Angular 2+, Material UI, Playwright, Jest, Vitest, Nx, RxJS, NgRx, TypeScript, Styled Components, React Testing Library, TestCafe, Jasmine, ElectronJS, Webpack, Gulp, Backbone.js, CoffeeScript, JavaScript, HTML5, CSS3, SASS
DATABASES	PostgreSQL, DynamoDB, AWS Aurora, AWS RDS, MongoDB, MySQL, Supabase, Firebase
MOBILE	React Native, Ionic, iOS, Android, Apache Cordova, Windows Mobile

EXPERIENCE

NerdWallet (via Number8)

Senior Full-Stack & ML Engineer *Sep 2023 - Current Remote (US client)*

Senior full-stack and ML engineer on a consumer-finance and credit platform, working end to end across the front-end, data pipelines, and production ML. Owned the ML workflow from data through modeling, training, and serving — a 4-15% revenue lift — shipped LLM-powered agentic workflows (RAG, tool calling), and revamped high-traffic customer-facing pages.

- Owned the machine-learning workflow end to end, from data exploration and cleaning through modeling, training, and deployment. Drove a 4-15% revenue lift over the manual baseline
- Shipped LLM-powered agentic workflows into customer-facing and internal products, using tool calling to retrieve and act on the product's own content instead of making users search for it
- Built the retrieval-augmented (RAG) layer behind the agents, grounding their answers in internal documentation and product data so responses stayed accurate and tied to real sources
- Built and orchestrated the data-engineering workflows (Apache Airflow) that ingest and clean customer and external data into the inputs feeding the ML models
- Deployed models that analyze user behavior to optimize the pages, with observability on results and retraining loops so they kept improving as data shifted
- Revamped, restyled, and migrated high-traffic customer-facing pages onto the current front-end stack. Shipped advanced, responsive features that improved the user experience

Technologies: Machine Learning • LLM • Node.js • Python • Data Engineering • AWS CDK • Snowflake • Apache Spark • Apache Airflow • AWS Lambda • Next.js • GraphQL • AWS Kinesis • RAG • Tool calling • MLOps • TensorFlow • Keras • scikit-learn • Pandas • ABSSmartly • TensorFlow.js • Anthropic SDK • Vercel AI SDK • AWS SNS • AWS SQS • AWS API Gateway • AWS AppSync • AWS S3 • AWS CloudWatch • AWS IAM • AWS KMS • AWS SAM • AWS Fargate • Docker • Docker Compose • GitHub Actions • Feature Flags • Vercel • Apollo Server • REST • Django • FastAPI • SQL • DynamoDB • AWS Aurora • AWS RDS • PostgreSQL • React • TypeScript • Redux • Playwright • Jest • Vitest • React Testing Library • Material UI • JavaScript • HTML5 • CSS3

Capital Markets Gateway (via Number8)

Tech Lead & Senior Software Engineer *May 2021 - Sep 2023 Remote (US client)*

Technical lead and senior engineer on a platform modernizing how institutions run capital-market operations, used by around 10 financial institutions. Led a 4-person team building advanced front-end features and designing the GraphQL gateway over complex backend services, across multiple domains.

- Led front-end development across multiple domains, designing and building advanced features that improved functionality and workflow efficiency
- Designed the GraphQL gateway fronting complex backend services and data sources, orchestrating intricate data workflows and improving the system architecture
- Improved customer-facing page performance, cutting latency from 3-5 seconds to under 500ms by resolving N+1 query issues in the gateway
- Implemented real-time data updates with SignalR to keep live data in sync. Built reusable component libraries in an Nx monorepo used across domains
- Provided technical leadership: translating complex stakeholder requirements into work, coordinating delivery, mentoring teammates, and handling strict data-integrity flows where correctness was critical
- Set up testing, deployment, and feature-flag infrastructure with unit and end-to-end coverage to keep releases reliable

Technologies: Node.js • GraphQL • NestJS • Next.js • Redux • Amazon EKS • AWS API Gateway • CircleCI • AWS RDS • Playwright • React • Apollo Server • SignalR • REST • Docker • Docker Compose • Feature Flags • SQL • PostgreSQL • TypeScript • Nx • React Testing Library • Jest • TestCafe • Material UI • Styled Components • JavaScript • HTML5 • CSS3

Shutterfly (via Encora)

Senior Software Engineer *Oct 2020 - May 2021 Remote (US client)*

Engineer building customer-facing media-management products at Shutterfly, a consumer media platform with tens of millions of users and billions of photos. Worked across web and mobile and several product stacks.

- Designed and built customer-facing features for media upload, storage, and management, shipping on web and mobile (React Native)
- Worked across several products and stacks (React, JavaScript, Ruby, Backbone), owning features from design through deployment
- Debugged and resolved issues across the products with code reviews and best practices, keeping the apps reliable

Technologies: React • React Native • Node.js • Ruby • Redux • Docker • Docker Compose • CoffeeScript • Backbone.js • Jest • REST • Styled Components • Jasmine • Webpack • JavaScript • HTML5 • CSS3 • SASS

Confidential Startup

Team Lead & Architect *Jun 2020 - Oct 2020 Remote (US client)*

Team lead and principal architect at a US startup building a greenfield system to modernize probation services across mobile, web, and back-end. Led a 4-person team and took it from inception to a delivered product in about four months, designed for thousands of concurrent users.

- Owned the architecture for a greenfield product across mobile, web, and back-end, designing a scalable foundation that could adapt as requirements evolved
- Built the mobile and web front-ends from scratch (React Native, Next.js) and the back-end. Set the patterns the rest of the team built against and defined the data model and service structure
- Led technical planning and delivery. Mentored the team from inception, running code reviews and setting the engineering practices and standards

Technologies: Node.js • Next.js • React Native • FastAPI • Python • AWS CDK • AWS Lambda • Docker Compose • Express.js • GitHub Actions • Firebase • SQL • Firebase Functions • Docker • Flask • REST • React • TypeScript • Redux • Jest • Jasmine • Styled Components • JavaScript • HTML5 • CSS3

Manhattan Associates (via Number8)

Senior Software Engineer *Nov 2019 - Jun 2020 Remote (US client)*

Senior engineer on a 10-person team on an international project building an enterprise retail point-of-sale platform used by major global retail brands across their stores worldwide. Built core commerce features and a configurable, declarative UI, and shipped across web, mobile, and desktop.

- Built core commerce features across the POS: payments, inventory, product variants, discounts, and promo codes
- Made the POS configurable and extensible through declarative UI rendering and per-client configuration, so each retail client could adapt it without reworking the core
- Shipped across all five targets: web, iOS, Android, Windows Mobile, and desktop (Electron)
- Built the API integration layer and feature-flagging for safe, independent rollouts. Kept a transaction-critical platform resilient across releases with unit and end-to-end test coverage

Technologies: Angular 2+ • TypeScript • NgRx • RxJS • Node.js • Cordova • Ionic • ElectronJS • Gulp • Jasmine • REST • Webpack • iOS • Android • Windows Mobile • JavaScript • HTML5 • CSS3 • SASS

BrightInsight (via PSL/Perficient)

Front-end Architect *Feb 2019 - Nov 2019 Remote (US client)*

Front-end architect and tech lead on a regulated, high-compliance healthcare product for blood-glucose monitoring and medication management. Led a 6-person team and owned the front-end architecture across two web applications delivering real-time patient monitoring.

- Owned the front-end architecture across two web applications (Angular 2+ and React) with responsive, accessible interfaces. Delivered under regulated, high-compliance medical-software standards
- Architected and built real-time monitoring of patient health data, including blood-glucose tracking, plus medication-management features. Integrated with backend services to power the patient-facing experience
- Led and directed the development team, running code reviews and setting the front-end practices and code-quality standards

Technologies: React • Angular 2+ • NgRx • Node.js • Express.js • RxJS • Redux • Jasmine • TypeScript • Webpack • JavaScript • REST • HTML5 • CSS3 • SASS

Xenial (via PSL/Perficient)

Frontend Engineer *Feb 2018 - Feb 2019 Remote (US client)*

Frontend engineer on Xenial, an enterprise QSR point-of-sale platform with 51,000+ restaurant installations across 62 countries, used by chains like Wendy's, Burger King, Taco Bell, Panda Express, and Dutch Bros. Built features and UI across the POS and the on-site systems that kept it running in stores, with a globally distributed team.

- Built features and UI across the POS on Angular and React, including its mobile builds, to streamline store operations
- Built a distributed print-queue that kept stores printing across up to 15 in-store tablets over a custom protocol, with a master node owning the printer and automatic failover when a tablet dropped
- Tailored the POS to each chain's needs, configuring features per client. Drove technical decisions while coordinating with a globally distributed team

Technologies: React • Angular 7 • RxJS • NgRx • Ionic • ElectronJS • iOS • Android • Cordova • Webpack • Jasmine • TypeScript • REST • JavaScript • HTML5 • CSS3 • SASS

Tec-innova

Software Engineer *Feb 2015 - Feb 2018 Cali, Colombia*

Full-stack software engineer building healthcare management applications and brand-tailored web platforms for healthcare institutions and businesses.

- Built core modules of a healthcare management system: patient records, admissions, scheduling, billing, and lab results
- Led the design and delivery of ~20 brand-tailored web platforms for a range of businesses, from dashboards and custom apps to e-commerce
- Handled the full stack, with React front-ends and PHP/PostgreSQL backends

Technologies: React • PHP • PostgreSQL • SQL • JavaScript • REST • HTML5 • CSS3

EDUCATION

ICESI University

Feb 2020 - Jul 2021

MSc - Data Science

ICESI University

Jul 2013 - Jul 2018

BSc - Software Systems Engineering

CERTIFICATIONS

AWS Certified Solutions Architect – Associate

Amazon Web Services (AWS)

Aug 2023

Scrum Master

CertiProf

Aug 2020

LANGUAGES

English C2 (IB Diploma)

Spanish Native