FELIPE JACOB GALINDO SUAREZ

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PROFESSIONAL SUMMARY

Senior Full Stack Engineer with over 20 years of experience designing and developing high-quality, scalable web applications. Experienced in modern JavaScript frameworks including React, Angular, Vue.js, Next.js, and TypeScript, with expertise in GraphQL for efficient data handling. Strong focus on rigorous testing using Jest and other automated methods to ensure reliability and performance.

As a full stack developer, I have closely collaborated with product, design, and backend teams to deliver scalable, maintainable solutions that align with business goals. Experienced in architecting and deploying cloud-native applications using AWS services such as ECS, Lambda, and DynamoDB. Proven track record in translating complex requirements into agile, responsive solutions that drive performance improvements in public safety products.

TECHNICAL SKILLS

- **Backend**: JAVA Spring Boot, .NET, Node, Python and PHP
- **Frontend**: TypeScript, Angular 19, React 18, Ionic, Capacitor, HTML5, SASS, Vue.js, Javascript, AJAX, GraphQL, Figma
- **Cloud Computing**: AWS S3, EC2, Lambda
- **Databases**: SQL (PostgreSQL, MySQL), MyBatis, MongoDB, FireBase
- **Business Intelligence**: Tableau, PowerBI
- **DevOps Tools**: CI/CD pipelines, Kubernetes
- **AI Tools**: GitHub Copilot, Cloud Code, Gemini, ChatGPT, Vercel, Replit, Lovable
- **Methodologies**: User Centered Software Engineering, User Centered Design, Agile/Scrum

PROFESSIONAL EXPERIENCE

Texas-Academy.com   **May 2025 - Present**
CTO

Focused on architecting and implementing AI-driven education systems that combine metaverse, blockchain, and generative AI technologies to deliver scalable, adaptive, and immersive digital learning experiences. Core contributions involve Python engineering, multi-agent AI development, Model Context Protocol (MCP) integration, and system optimization using modern frameworks such as LangGraph. Rapid prototyping using Lovable.

- Developed immersive 3D virtual classrooms using three.js, enabling real-time communication and interaction via WebRTC and WebSockets.
- Implemented optimized rendering pipelines and modular 3D components with accessibility-first design.
- Performed end-to-end usability testing to validate performance, collaboration mechanics, and user navigation.
- Designed and deployed Solana smart contracts for blockchain-based certification issuance.
- Built Python-based integrations to securely link credential validation with LMS course completion events.
- Automated transaction monitoring pipelines to ensure reliability and transparency.
- Built retrieval-augmented tutoring agents that dynamically accessed course materials, lecture transcripts, and blockchain-verified credentials to provide factually grounded, context-aware responses.
- Designed vector databases (FAISS / Chroma) to index educational content and student progress data, enabling real-time retrieval during tutoring sessions.
- Engineered multi-agent AI systems in Python leveraging the LangGraph framework for reasoning, orchestration, and task decomposition.
- **Integrated the Model Context Protocol (MCP) as a universal adapter, enabling agents to securely discover, access, and use external tools, CRMs, databases, calendars, and API-driven services in real time.**
- Built contextual memory pipelines to manage student progress, multi-turn dialogue, and adaptive tutoring logic.
- Designed async microservices in Python (FastAPI, asyncio) for low-latency inference and recommendation engines.
- Implemented hybrid architectures combining LangChain + LangGraph + MCP to support persistent, tool-aware, retrieval-augmented learning agents capable of autonomous workflows.
- Integrated OpenAI and Anthropic APIs into intelligent tutoring services with fine-tuned prompting and embedding search.
- Developed middleware for dynamic context injection, MCP-enabled tool access, and real-time session state management.
- Automated evaluation workflows to optimize learning-path recommendations and model accuracy.
- Built proprietary WordPress CMS plugins with PHP-based backends enabling AI personalization, blockchain validation, MCP-powered tool integrations, and metaverse features.
- Designed extensible data models for smooth integration with external LMS systems and third-party education tools.

Texas Health and Human Services Commission Aug 2024 - June 2025
FullStack Developer

Architected and led the development of a statewide web application commissioned by Texas HHSC to manage Psychiatric Bed Assignments across all mental health facilities in Texas. The platform centralizes the full patient lifecycle—from initial admission based on funding eligibility, through in-care state-driven workflows, to discharge and post-discharge rule enforcement—while also providing dedicated reporting capabilities for subcontracted providers.

Designed a monorepository-based suite of micro-frontend applications to ensure seamless integration, modular scalability, and high performance across teams and deployments. Collaborated closely with backend teams to align .NET service interfaces with the modular frontend architecture, ensuring tight integration and consistent data flow.

Engineered a modern client-side application using Angular 18 with a strong emphasis on scalable component architecture and enterprise-grade state management. Leveraged NgRx/Redux patterns to maintain predictable state transitions, support lazy-loaded modules, and enable real-time synchronization with .NET API endpoints throughout the complex patient-workflow processes.

- Integrated RESTful services into a reactive front-end architecture, partnering closely with .NET back-end teams to streamline the delivery of business-critical data through secured, well-documented APIs. Developed dynamic UI components that consumed .NET Core microservices, ensuring resilience and performance under high-load conditions.

- Implemented end-to-end testing protocols, including unit tests and logic validation using ngRx selectors and effects, while maintaining close alignment with the behavior of corresponding .NET back-end components. Led a UI-front end team to produce maintainable code with extensive test coverage using Jasmine and Karma.

- Translated complex business, accessibility, and **compliance requirements into scalable, intuitive UI solutions fully aligned** with **WCAG** and Material Design standards. Actively contributed to cross-functional planning sessions to ensure frontend deliverables were fully compatible with evolving .NET service contracts.

- Delivered production-ready code with comprehensive documentation and provided technical leadership during deployment, ensuring successful integration of Angular micro frontends with .NET-powered infrastructure. Oversaw CI/CD pipelines, code reviews, and architectural governance to enforce maintainability, security, and testability standards across the stack.

Capital One Mar 2024 - Jul 2024
FullStack Developer
Developed a cross-platform Angular 17 monorepository application leveraging the Ionic framework, Capacitor, and Redux to support seamless deployment across web and mobile platforms. The Ionic + Capacitor implementation enabled a native-like experience on iOS and Android devices while maintaining a single codebase for maintainability and scalability. Capacitor acted as a native runtime bridge, allowing the web application to access native device features such as camera, geolocation, and file storage, while also enabling deployment to app stores. The project integrated multiple business units, significantly enhancing front-end performance and user experience.

- **Implemented Redux** for centralized state management, improving application predictability, debugging capabilities, and overall performance across complex mobile and web interactions. Designed a scalable store structure and ensured clean separation of concerns between UI components and business logic.

- **Engineered creative UX solutions** to address advanced usability challenges. Collaborated closely with development teams, clearly communicating design prototypes and technical concepts.

- **Designed and implemented responsive UI components** using Ionic, focusing on performance, accessibility, and consistency across devices. Engineered advanced UX flows using Ionic's UI toolkit and Capacitor's native integration features, ensuring an intuitive experience across mobile and tablet form factors.

- **Specialized in scalable front-end architecture** using Angular 17, Ionic, Capacitor, and Redux, supported by comprehensive automated testing via Jest. Collaborated with design and development teams to deliver pixel-perfect mobile experiences while adhering to enterprise-level standards for maintainability and performance.

- **Optimized API consumption and data integration processes** to streamline real-time user interactions across web and mobile environments. On the backend, developed and maintained robust RESTful services using Java SpringBoot, ensuring secure, high-performance data exchange across functional modules.

- The **Java SpringBoot architecture** supported dynamic routing, business rule validation, and third-party service integrations.

Contributed to backend service orchestration and data modeling, ensuring smooth interoperability with the Redux-powered frontend state.

Texas State Guard Department
FullStack Developer
Apr 2023 – Feb 2024

Spearheaded the development of a new permissions module in an Angular 15 application, enhancing routing protection and user authorization workflows through improved state management and fine-grained access control. Engineered highly interactive and responsive UI features to support administrative and financial oversight, focusing on ADA accessibility and real-time data visibility for critical General Ledger (GL) entries. Designed and developed scalable .NET APIs to ensure secure and consistent communication with backend systems, supporting key modules related to accounting, audit logging, and compliance tracking.

- Maintained and extended multiple .NET services to integrate with enterprise systems, enabling reliable processing of financial transactions and GL activities.
- Leveraged .NET Core to implement RESTful endpoints that supported complex financial operations and integrated seamlessly with Angular front-end components.
- Collaborated with cross-functional teams to optimize .NET back-end logic, improving performance, reliability, and maintainability of the audit and reporting services.
- Utilized .NET in combination with Azure Functions to automate critical financial workflows, such as ledger validations, transaction summaries, and compliance scheduling—ensuring scalable, serverless execution.
- Built complex reactive forms with custom validations in Angular to streamline financial data input and enforce accounting integrity. Championed responsive design principles, delivering optimized user experiences across devices for both field and administrative users.
- Led a UI-front end team to produce maintainable code with extensive test coverage using Jasmine and Karma.
- Led testing strategy using Jest for front-end and Chai for back-end, ensuring high-quality, maintainable code across the Angular and .NET stack. Integrated advanced monitoring and logging to support audit traceability and system compliance.

Capital One, Texas Sep 2022 - Apr 2023
FullStack Developer
Designed and developed a Bulk Mail System with a strong emphasis on scalable and maintainable front-end architecture, delivering a robust platform capable of handling high-volume transactional communications.

Led the front-end development using React and Next.js, building modular, reusable, and pixel-perfect UI components while ensuring optimal performance and responsiveness across devices. Integrated Connex UI and Empath framework into the React-based design system to ensure design consistency and a smooth user experience across the application.

- Implemented server-side rendering and dynamic routing through Next.js, enhancing page load times, SEO, and application structure. Focused heavily on accessibility, cross-browser compatibility, and mobile-first design to align with enterprise usability standards.
- Collaborated closely with UI/UX designers and back-end engineers in an Agile environment, clearly articulating design concepts, wireframes, and technical requirements. Took ownership of translating business logic into intuitive interfaces, frequently leading technical discussions and front-end code reviews.
- Developed and maintained automated testing infrastructure using Jest, improving test coverage and ensuring code reliability across multiple user workflows.
- On the backend, designed and deployed scalable Java Spring Boot microservices to handle business logic, email dispatch, and system orchestration. Optimized API performance and implemented robust error-handling strategies to support a reliable communication layer.
- Managed CI/CD pipelines using Docker, Jenkins, and Git, ensuring seamless integration, testing, and deployment processes across development, staging, and production environments. Played a key role in maintaining and evolving DevOps workflows to support faster delivery cycles and consistent release quality.

The Janssen Pharmaceutical Companies, New Jersey Jan 2022 - Sep 2022
FullStack Developer New Jersey
Customized graphical reports using JavaScript and CSS to elevate front-end data visualization capabilities, ensuring clarity, usability, and alignment with research needs. **Conducted user research and feedback sessions with genetic researchers** to understand workflows and data interpretation challenges, translating findings into intuitive UI designs.

- Built structured **information architecture and user flows** to simplify complex genetic data exploration. Designed **wireframes and prototypes in Figma (low- and high-fidelity)** to validate visualization approaches before implementation, reducing rework and increasing adoption.

- Facilitated **usability testing** to refine data presentation and interaction patterns, resulting in more accessible and user-friendly reporting tools. **Integrated AI tool APIs within a React application** to process and analyze genetic data in real time, collaborating closely with researchers to deliver user-centered solutions.
- Engineered reusable, responsive front-end components in a React environment, while also developing backend microservices in Python and managing deployments with Docker and Jenkins to ensure scalability and reliability.

Bang Energy, Miami Nov 2021 - Jun 2022
FullStack Developer Miami
Implemented front-end solutions for Salesforce Commerce Cloud projects to automate marketing efforts and enhance user experience.
- Translated business requirements into responsive, pixel-perfect front-end interfaces.
- Communicated design prototypes and technical concepts to development teams under agile frameworks.
- Engineered back-end microservices using Salesforce-specific development practices to support integrated systems.

Wisconsin Department of Health Services Apr 2021 - Nov 2021
Full Stack Developer
Developed a comprehensive system for managing health benefits with an emphasis on responsive front-end design using Angular.
- Conveyed design concepts and prototypes to developers to ensure consistency and clarity in UI development.
- Led a UI-front end team to produce maintainable code with extensive test coverage using Jasmine and Karma.
- Integrated Salesforce Lightning Design System (SLDS) elements to create intuitive, user-friendly interfaces.
- Managed deployment processes using Docker, Jenkins, and GitHub, ensuring a seamless CI/CD pipeline.

Best Buy, Minneapolis & Capital One in Texas through Wipro Mar 2019 - Apr 2021
Digital Architect Minneapolis & Texas
Defined front-end architecture for supply chain applications using Angular 12, ensuring clean integration with Spring Boot backend services.
- Guided the design and development of an auto loans application, specifically engineering the authentication module and statistical data modules with Angular.
- Communicated design and user experience strategies to development teams to solve complex usability challenges.
- Managed end-to-end deployments using Docker, Jenkins, and GitHub, reinforcing robust CI/CD practices.
- Integrated backend API consumption requirements, ensuring seamless connectivity between front-end and microservices.

CVS, Pittsburgh Jan 2018 - Dec 2018

Full Stack Developer

Part of a 60-developer team across onsite and offshore environments to design and build a critical medicine supply chain system using Angular 6, Ionic, and Java SpringBoot. The application was architected to function across web and mobile platforms using the Ionic framework, while the backend leveraged Java SpringBoot to deliver scalable and secure APIs.

Defined front-end architecture integrating Ionic components for mobile responsiveness, and created UI wireframes with Axure to guide development. Engineered reusable components and services with Ionic and Angular, ensuring smooth UX across devices.

Collaborated with cross-functional agile teams to deliver full-stack solutions powered by Java SpringBoot, supporting real-time inventory tracking and logistics.

Actively contributed to backend integration, implementing RESTful services in Java SpringBoot and optimizing data exchange for high-volume operations. Utilized MyBatis for efficient and maintainable MySQL query management, ensuring fine-grained control over SQL execution and performance tuning.

Oversaw code quality and deployment strategies for Java SpringBoot microservices, reinforcing system reliability and maintainability.

Facilitated Agile ceremonies, including Sprint Planning and SCRUM, to align development goals and ensure successful delivery of the Ionic and Java SpringBoot-based platform.

Engineered component and service code to create responsive and scalable user interfaces.
 Collaborated with cross-functional agile teams to build, test, and implement full-stack technical solutions.

Ericsson, Silicon Valley Sep 2017 - Jan 2018
FrontEnd team leader, FullStack Developer Silicon Valley
Developed a reactive web application for Unified Development Network (UDN) focused on ticket control and rapid issue resolution, aligning both technical performance and user experience goals.

- **Conducted user research and stakeholder interviews** to capture requirements, pain points, and workflows, ensuring the solution addressed real user needs. Created structured **information architecture and user flows** to simplify navigation and optimize task efficiency.
- Designed and refined **wireframes in Figma**, producing both **low- and high-fidelity prototypes** to validate functionality before implementation. Facilitated **usability testing sessions** that uncovered critical UX improvements, leading to more intuitive interfaces and reduced training time.
- Coordinated business requirements into front-end development tasks under agile methodologies, while engineering responsive web applications with modern JavaScript practices to maximize component performance.
- Translated wireframes and designs into high-quality code and collaborated cross-functionally in all Agile ceremonies, ensuring iterative improvements and rapid delivery.

Live Oak Bank, North Carolina Feb 2017 - Sep 2017
FullStack Developer North Carolina
Delivered deposit and loan projects by enhancing user experience through robust front-end development in React and Angular.
- Followed MVC patterns for seamless AWS web services consumption, ensuring responsive UIs.
- Refined front-end code to improve performance and usability while maintaining high coding standards.
- Collaborated with teams to integrate backend Apex services for a comprehensive banking solution.

SAP Montreal, Canada Sep 2016 - Jan 2017
SAPUI5 Front-end Developer Montreal, Canada
Enhanced locomotive maintenance operations by over 20% through a custom SAPUI5 application built with MVC pattern.
- Collaborated internationally using SAPUI5 framework to ensure a unified, responsive front-end experience.
- Authored well-documented code and adhered to established coding standards to maintain software quality.
- Produced and maintained detailed technical documentation, supporting smooth transitions during agile ceremonies.

IBM, Banorte in Mexico City Jan 2014 - Dec 2014
UX Front-End Developer Mexico City
Spearheaded the development of two high-profile online banking platforms under aggressive deadlines, integrating the **Dojo framework** with **modern CSS precompilers** to deliver responsive, pixel-perfect front-end experiences. Led front-end architecture design, emphasizing cross-browser performance and maintainability.

- Deployed applications on **IBM WebSphere Application Server 8.5**, ensuring enterprise-grade scalability, availability, and secure delivery of banking services. Utilized **IBM Rational Application Developer (RAD)** for efficient Java EE development and seamless deployment workflows within the WebSphere environment.
- Collaborated with backend teams using **Apache Struts 1.2+** and **MyBatis** for the persistence layer, contributing to the seamless integration of dynamic UI components with robust Java-based MVC backends. **Used MyBatis to manage complex SQL operations on IBM DB2 and MySQL**, enabling fine-tuned control over database interactions and query performance.
- Translated complex business requirements into scalable technical solutions, aligning user-centered design principles with secure, maintainable back-end services. Directed a hybrid team of onshore and offshore developers, enforcing agile delivery practices and consistent UI/UX standards.
- Engineered advanced CSS architectures and optimized Dojo components to ensure maximum performance and usability across browsers and devices.

Inter X Digital Solutions
Founder & FullStack Developer   October 2005 - December 2024

Description: Developing multi touch applications, e-learning, video games and interactive websites

Responsibilities

- As a FullStack developer at this company, I have been involved in several projects related to e-learning in private and public universities and private companies.
- I have also developed pharmacoeconomics applications for recognized laboratories where economical and financial concepts were important to understand client requirements.
- In the tourism industry I have developed email marketing campaigns and also multitouch applications.
- Another important achievement was related with video game development using actionscript 2.0 and 3.0, php on the backend.

Portfolio at: **https://interx.us/**

Technical Platform:

Photoshop, Figma, HTML5, CSS3, JQuery, as3, JavaScript, PHP, **Angular**, **React**, **Vue**, NET, **Python**, Ethereum - Solidity, ThreeJS

EDUCATION AND CERTIFICATION

UNAM Mexico City
Bachelor, Economics
- **Achievements:** Hackathon: EarthX Mexico - Third place prize: Agriculture Project Mexico City
  Developed an Angular-based application for an agricultural trading initiative focused on the apple supply chain in rural regions of Mexico. Integrated GIS mapping technologies with AgGrid to visually represent and manage geographical data related to farm locations, production zones, and logistics routes.

  - Collaborated in the integration of blockchain technology to ensure traceability, transparency, and secure logging of transactions across the supply chain—from orchard to marketplace.
  - Created intuitive dashboards to display real-time data on crop yield, regional trading activity, and delivery logistics, enhancing decision-making for farmers and stakeholders.
  - Implemented reactive forms with custom validations to ensure clean data entry for farmers and distributors across variable internet conditions.
  - Focused on responsive design and accessibility to support mobile users in rural areas, ensuring compliance with usability standards.
  - Worked closely with agronomists and local stakeholders to tailor digital tools that respected regional trading practices and infrastructure limitations.

- **Coursework:** PHP Programming Language

Collin College Plano, Texas

LICENSES & CERTIFICATIONS

- **Real Estate License**: Collin College Plano, Texas
- **Angular Certification**: testDome Online
- **Bachelor of Economics**: UNAM Mexico City - 2018
- **PHP Programming Language**: D.G.S.C.A. UNAM Mexico City
- **Hackathon**: EarthX Mexico - Third place prize: Agriculture Project Mexico City
- **Certified Professional Communication Coach**: Ministry of Labor and Social Welfare in México

LANGUAGES

- Spanish (native)
- English (bilingual)
- French (intermediate)

VOLUNTEER EXPERIENCE

Abracalibro Jun 2017 - Present
Mentor
- As a mentor for Abracalibro, I provide guidance to low-income students pursuing careers in tech, offering career advice, web development support, and communication strategies to help them succeed in their professional journeys.