Darwin Fegarido

Software Engineer | Full Stack Web Developer | Python | Node.js & JavaScript | ReactJS | 7+ Years in Scalable APIs & Microservices

San Pablo, Laguna, Philippines 4000

463 956 570 5207

darwinfegarido@gmail.com

Portfolio: <u>dfegarido.github.io/portfolio</u>

GitHub: github.com/dfegarido

SUMMARY

Backend Developer with over 7 years of experience in backend and full-stack development, now extending expertise into AI integration and LLM-powered applications. Skilled in building scalable APIs, microservices, and real-time systems with Node.js, Python, and cloud services, alongside hands-on experience with ETL pipelines and data engineering.

Proven track record in developing AI-driven solutions, including RAG (Retrieval-Augmented Generation) pipelines that leverage vector databases for knowledge retrieval and intelligent search. Adept at integrating LLMs (ChatGPT, Ollama, OpenAI APIs) into applications to enhance automation, chat systems, and data workflows.

Successfully mentored developers and optimized CI/CD pipelines across Azure, AWS, and GitHub Actions, improving team efficiency and deployment reliability. Experienced in creating integrated platforms, CMS solutions, and real-time chat systems, while ensuring data normalization, performance optimization, and security best practices.

Passionate about blending traditional backend engineering with AI-powered systems, driving innovation through LLM integration, vector search, and intelligent automation to deliver next-generation solutions.

EXPERIENCE

Freelance Full Stack / Backend Engineer
Self-Employed
2025-07 - Present · Freelance

Key Responsibilities:

- Delivered advertising automation workflows using Make.com with AI integration (ChatGPT, Groq) to streamline campaign execution.
- Built and deployed social networking platforms and mobile applications with Node.js (Express), React Native, and AWS (ECR, ECS Fargate).
- Developed serverless e-commerce solutions with Firebase
 Functions and React Native to support scalable retail operations.
- Implemented matching and recommendation features in web applications (e.g., PhillyMatch) using Laravel, questionnaires, and profile-based matching.
- Designed and integrated hotel booking workflows into travel platforms (e.g., MasayaTripPH) with seamless user experience and payment support.
- Deployed and maintained ReactJS admin panels with CI/CD pipelines using GitHub Actions, Amazon S3, and CloudFront for secure, scalable delivery.

SKILLS

- ☑ Python (Flask, Django)
- ☑ Node.js (Express.js)
- ☑ MongoDB, PostgreSQL
- ☑ PySpark (ETL Pipelines)
- ✓ Firebase (Authentication, Firestore, Notifications)
- Expo SDK (Push Notifications)
- ✓ WebSocket & Socket.IO (Real- Time Chat)
- Agile & Scrum Methodology
- ☑ REST APIs, Microservices Architecture
- ✓ ReactJS, VueJs (Frontend)
- ✓ Web3js
- Redis
- ✓ AI Integration (LLMs, Chatbots, Automation)
- ✓ RAG (Retrieval-Augmented Generation) using LLMs & Vector Databases
- ▼ Vector Stores (Pinecone, FAISS)
- ✓ Prompt Engineering & Workflow Orchestration

HIGHLIGHT PROJECTS

Real-Time Chat System

Developed robust 1-to-1 and group messaging features using **Firebase and Socket.IO**, enabling instant real-time communication across mobile and web platforms.

☑ Data ETL Automation

Built a modular and scalable data ingestion pipeline using **PySpark and Python**, automating daily analytics and reporting processes for large datasets.

☑ Railway Load Prediction System – Melbourne, Australia

Designed a predictive analytics tool that estimates passenger overflow during station disruptions and calculates optimal bus dispatching using real-time data inputs.

Key Projects:

- Advertising Automation Created automated campaign workflows integrating AI (ChatGPT, Groq) and Make.com.
- Shareikna App (Saudi Arabia) Social networking platform built with Node.js (Express), React Native, deployed via AWS ECS Fargate (ECR + ALB).
- Shareikna Admin Panel (<u>admin.shareikna.com</u>) Built with ReactJS, deployed to Amazon S3 + CloudFront, automated CI/CD via GitHub Actions.
- ILeafU (USA) Mobile e-commerce app for plant sales, powered by Firebase Functions + React Native.
- PhillyMatch (<u>phillymatch.org</u>) Social networking platform developed in Laravel, featuring questionnaire-driven profile matching.
- MasayaTripPH (<u>masayatrip.com</u>) Travel booking platform enabling hotel reservations across selected destinations.

Sr Full Stack Engineer

VISEO ASIA 2021-02 - 2025-7 · 4 years

Key Responsibilities:

- Engineered scalable backend systems using Node.js and Python to support analytics-driven applications.
- Designed and deployed end-to-end ETL workflows that process real estate data from Parquet files, enabling seamless transformation and loading using PySpark and Pandas.
- Built and maintained user-facing applications using modern frontend frameworks like Vue.js and React.js.
- Administered CI/CD pipelines in Azure, streamlining deployment cycles and improving system reliability.
- Tuned SQL queries and restructured database schemas to significantly enhance performance and query efficiency.
- Deployed backend Node.js APIs using Docker, uploaded to Amazon ECR, and executed on AWS ECS Fargate with Application Load Balancer for scalable request handling.
- Set up frontend React.js applications hosted on GitHub, with automated build and deploy workflows via CI/CD to Amazon S3, delivered through CloudFront, and routed via Route 53.
- Mentored junior and mid-level engineers by promoting engineering best practices, conducting code reviews, and fostering a strong knowledge-sharing culture.

Key Achievements:

- Successfully migrated legacy Pandas ETL workflows to PySpark, significantly improving data processing performance.
- Delivered a modular real-time chat service architecture using WebSockets and Firebase.
- Built a fully containerized microservice backend with AWS Fargate, improving scalability and deployment time.
- Streamlined backend codebases for better maintainability, performance, and faster onboarding of new developers.

✓ Advertising Automation with AI Automated advertising workflows using Make.com and AI integration (ChatGPT, Groq) to streamline content generation, campaign execution, and performance tracking.

☑ Shareikna App & Admin Panel – Saudi

Developed a social networking platform and admin panel using Node.js (Express), React Native, and ReactJS. Deployed backend with AWS ECS Fargate (ECR + ALB) and frontend to Amazon S3 + CloudFront with CI/CD pipelines via GitHub Actions.

✓ ILeafU Mobile App — USA
Built an e-commerce mobile application
for plant sales using Firebase Functions +
React Native, supporting seamless
payments, order tracking, and push
notifications.

✓ PhillyMatch – USA (phillymatch.org) Created a social networking platform using Laravel, enabling users to match based on questionnaire-driven profiles.

✓ MasayaTripPH – Philippines (masayatrip.com)

Implemented a **travel and hotel booking platform**, allowing users to book accommodations across selected destinations with integrated search and reservation workflows.

Remy Cointreau – Liquor eCommerce (https://www.remy-cointreau.com/)
Implemented a branded Shopify
eCommerce solution with integrated
payment systems, product catalog, and SEO optimization for improved visibility and conversions.

AVAILABILITY

- Open to Remote Backend Engineer roles or Full Stack positions with backend focus.
- Can start immediately.

Full Stack Engineer

Quantum Crowd 2020-04 - 2021-01 · 9 months

Key Responsibilities:

- Built scalable and secure backend services using Node.js for core insurance workflows, including user authentication, policy, and claims management.
- Integrated closely with Vue.js frontend components, ensuring smooth data flow and consistent UX.
- Designed RESTful APIs and structured service layers for reusability and maintainability.
- Enhanced developer experience by implementing comprehensive API documentation using Swagger/OpenAPI.
- Optimized server-side logic and asynchronous processes for high performance and reliability.

Key Achievements:

- Delivered core backend modules ahead of schedule, enabling a successful MVP launch.
- Reduced API response times by over 30% through performance tuning and query optimization.
- Significantly improved team velocity by introducing standardized, well-documented API structures.

Full Stack Engineer

Taktyl Studios

2019-11 - 2020-07 · 8 months

Tech Stack: Node.js, Express.js, MongoDB, REST APIs

Key Responsibilities:

- Led backend development of a Content Management System (CMS) tailored for gaming analytics and operational dashboards.
- Built robust data normalization pipelines to aggregate in-game metrics and player behavior insights.
- Designed RESTful APIs to support internal tools and external analytics visualization.
- Collaborated with frontend teams to ensure real-time syncing and reporting accuracy.

Key Achievements:

- Improved backend data processing performance by 25%, enhancing analytics turnaround time.
- Enabled near real-time game telemetry insights by streamlining backend logic and database operations.
- Delivered scalable backend infrastructure that supported multiple live game environments.

Mid Fullstack Developer

New Oriental Club88

2019-03 - 2019-08 · 5 months

Tech Stack: CentOS, Python, Nginx, Cronjob, MySQL

Key Responsibilities:

- Developed backend services and automated scripts to integrate external data sources into internal systems using Python and cron jobs on CentOS environments.
- Managed server configurations and deployments using Nginx, ensuring high availability and optimized routing.
- Designed ETL processes to fetch and process data from third-party providers, enabling centralized analytics and operations.
- Implemented system-level logging and monitoring tools to enhance operational visibility and incident response.

Key Achievements:

- Hardened backend systems by implementing enhanced security protocols, reducing vulnerability reports by 50%.
- Streamlined data ingestion pipelines, improving data availability for internal dashboards and reports.
- Played a central role in maintaining a stable, secure server infrastructure used by multiple departments.

Full Stack / Python Developer

Skyluster Technology Inc.

2018-03 - 2019-02 · 11 months

Tech Stack: Python, Node.js (Express), Django, JavaScript, Solidity, Web3.js, Bash, Ubuntu, Nginx, Ethereum

Key Responsibilities:

- Led backend development for a Web3-powered SaaS platform that allowed users to generate templated websites in one click.
- Designed and deployed smart contracts on the Ethereum network, including a custom ERC20 token, enabling crypto-based subscription payments.
- Integrated Web3.js into the frontend to facilitate real-time blockchain interactions such as wallet authentication and token transactions.
- Developed and maintained backend infrastructure using Node.js,
 Django, and Python, with server-side automation via Bash scripts.
- Managed Ubuntu servers and configured Nginx for secure, scalable hosting and traffic routing.

Key Achievements:

- Delivered a full-stack decentralized SaaS product with seamless Ethereum-based payments and smart contract automation.
- Successfully launched a custom ERC20 token, facilitating crypto transactions within the platform.
- Built robust backend services supporting both traditional REST APIs and blockchain communication with enhanced security and fault tolerance.