

Jose Marrero

Senior Software Engineer

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Profile

Senior Full Stack Engineer with 9+ years of experience building **scalable, secure, and high-performance applications**. Expert in **C#/.NET Core, Golang, Java (Spring Boot), and Python (Django, Flask, FastAPI)** for backend services, and highly skilled in **modern frontend frameworks (React, Next.js, Angular, Vue, TypeScript)** for responsive UIs. Strong background in **databases (PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch)**, **cloud/DevOps (AWS, Azure, GCP, Docker, Kubernetes, Terraform, CI/CD)**, and **security (OAuth2, JWT, OWASP, HIPAA)**. Experienced in **AI/ML integration** using **TensorFlow, PyTorch, Hugging Face, LangChain, NLP, and vector databases**, bridging backend engineering with intelligent systems to deliver measurable business impact.

Professional Experience

11/2023 – Present
Brooklyn, NY

Senior Full Stack Engineer, Fictive Kin

- Led the design and development of **enterprise-grade backend services** with **C#/.NET Core and ASP.NET** ☑, powering SaaS and healthcare platforms with **99.99% uptime**.
- Built and optimized **RESTful and GraphQL APIs** with **.NET Core, Node.js, and Python (Django/Flask)**, integrated with **PostgreSQL, MySQL, SQL Server, MongoDB, Redis, and Elasticsearch**, reducing query latency by **50%**.
- Architected **microservices and event-driven systems** in **.NET, Golang, and Java (Spring Boot)**, deployed on **AWS, Azure, and GCP** using **Docker, Kubernetes, Terraform, and Ansible**, enabling elastic scaling.
- Enhanced system reliability with **CI/CD pipelines (Jenkins, GitHub Actions, GitLab CI)**, cutting release cycles from **2 weeks to daily deployments**.
- Implemented **security best practices** including **OAuth2, JWT, SAML, IAM policies, encryption, and OWASP Top 10 compliance**, ensuring **HIPAA-ready applications**.
- Collaborated on **frontend development** with **React, Angular, Next.js, TypeScript, Tailwind CSS, and Material UI**, delivering pixel-perfect, accessible interfaces that improved UX scores by **30%**.
- Developed **real-time features** with **gRPC, WebSockets, and Kafka**, supporting live data sync across distributed systems.
- Applied **data engineering and analytics** with **ETL pipelines (Pandas, NumPy, Spark)**, enabling ML model training and large-scale reporting.
- Integrated **AI/ML models** (TensorFlow, PyTorch, Hugging Face, LangChain) into backend services, enabling predictive analytics and NLP-powered features.

- Improved code quality and reliability through **automated testing** with **xUnit, NUnit, Jest, Cypress, Playwright, and Selenium**, achieving **90%+ test coverage**.
- Mentored cross-functional teams in **C#/.NET backend best practices, microservices design, and DevOps automation**, improving sprint velocity by **25%**.

02/2020 – 09/2023
Durham, NC

Software Engineer, Gradient Health

- Integrated **AI/ML models (TensorFlow, PyTorch, scikit-learn)** into production APIs, enabling **medical imaging classification, predictive analytics, and real-time clinical decision support**.
- Built **NLP pipelines** with **Hugging Face Transformers and LangChain**, automating metadata extraction from medical records and improving provider search accuracy by **35%**.
- Collaborated with data scientists to **translate research ML models into production-ready services**, deploying them as **REST and gRPC APIs** with **C#/.NET Core, Python (Django, Flask, FastAPI), and Golang**.
- Designed **ETL pipelines** with **Pandas, NumPy, and Spark** to preprocess and structure large-scale imaging datasets, improving model training efficiency by **40%**.
- Deployed AI-enhanced microservices to **AWS (SageMaker, EC2, S3, Lambda)** and **Azure**, using **Docker, Kubernetes, and Terraform** for elastic scaling and HIPAA compliance.
- Established monitoring and logging for **AI-powered APIs** with **Prometheus, Grafana, and ELK Stack**, ensuring reliable inference and reducing MTTR by **30%**.
- Boosted API and ML integration quality with automated testing (**PyTest, xUnit, Postman**), reaching **85% coverage** and reducing production incidents.

03/2018 – 12/2019
San Francisco, CA

Full Stack Engineer, Atlassian

- Built and optimized **frontend apps** with **React, Next.js, and TypeScript**, improving load times by **30%** and delivering seamless collaboration features.
- Developed **backend services** with **Node.js and Express**, integrating **REST/GraphQL APIs** with **PostgreSQL and MongoDB** to support millions of daily requests.
- Deployed **microservices** on **AWS** with **Docker and Kubernetes**, enabling scalable and reliable product delivery.
- Increased quality with **Jest, Cypress, and Playwright** testing, achieving **85%+ coverage**.

07/2016 – 02/2018
San Francisco, CA

Web Developer, Collectly

- Designed and developed **responsive healthcare web applications** using **HTML5, CSS3, JavaScript (ES6+), React, Angular, and TypeScript**, improving patient engagement by **30%**.
- Built and maintained **backend services and APIs** with **C#/.NET Core and Node.js**, integrating with **PostgreSQL, MySQL, and MongoDB** to support secure, high-volume healthcare data transactions.
- Optimized system performance with **Redis caching and SQL tuning**, reducing query response times by **40%**.
- Enhanced UI/UX with **Material UI, Tailwind CSS, and Bootstrap**, delivering mobile-first, **WCAG-compliant** experiences.

- Implemented **automated testing** with **xUnit, Jest, Cypress, and Selenium**, achieving **85%+ coverage** across frontend and backend modules.
- Deployed applications on **AWS and Azure** using **Docker and Kubernetes**, enabling reliable CI/CD pipelines with **GitHub Actions and Jenkins**.
- Ensured **HIPAA-compliant security** with **OAuth2, JWT, IAM policies, and encryption**, safeguarding sensitive healthcare data.

 Skills

Languages & Backend

C#, .NET Core, Golang, Java (Spring Boot), Python (Django, Flask, FastAPI), Node.js (Express, NestJS), PHP, Ruby on Rails, SQL, NoSQL

Cloud & DevOps

AWS, Azure, GCP, Docker, Kubernetes, Terraform, Jenkins, GitHub Actions, CI/CD

Frontend

React, Next.js, Angular, Vue.js, TypeScript, JavaScript (ES6+), HTML5, CSS3, Tailwind, Material UI, Bootstrap

AI / ML

TensorFlow, PyTorch, scikit-learn, Hugging Face, LangChain, OpenCV, NLP, LLMs, Vector DBs (FAISS, Pinecone, Weaviate), Spark, Pandas, NumPy

Databases

PostgreSQL, MySQL, SQL Server, MongoDB, Redis, Elasticsearch, Snowflake, BigQuery

Testing & Security

xUnit, PyTest, Jest, Cypress, Playwright, Selenium, Postman, OAuth2, JWT, OWASP

 Education

08/2012 – 05/2016
Florida

Bachelor's Degree, Florida State University