Richard Ros

Senior Software Engineer & AI Solutions Architect

Technology and AI specialist with 15+ years of experience, focused on scalable, ethical, and efficient solutions that transform complex challenges into tangible business outcomes. Strong background in full-stack development, systems architecture, and AI solution implementation with a passion for innovation and continuous improvement.

Contact: +55 11 98156-4900 | richarddaros1@gmail.com | LinkedIn | GitHub | São Paulo, Brazil

Professional Experience

Sami | Senior Software Developer & AI Solutions Architect

Jan 2022 - Present

Technical leadership in developing an omnichannel platform for medical care, integrating virtual rooms with electronic medical records and implementing RAG systems for intelligent access to medical knowledge. Built vector data infrastructure with Pinecone and automated workflows with n8n and LangFlow.

Key Achievements: - Reduced medical service time by 40% through implementation of AI-powered triage system - Increased user satisfaction by 35% with new omnichannel platform - Led team of 8 developers in implementing microservices architecture - Implemented semantic search system that improved medical information retrieval accuracy by 60% - Designed and deployed vector database solution that scales to handle millions of medical documents

Technologies: TypeScript, Node.js, React, Next.js, Python, FastAPI, MongoDB, Pinecone, Redis, WebRTC, Socket.io, AWS (Lambda, SQS, S3, EC2), Docker, Kubernetes, LangChain, OpenAI API, HuggingFace

Cogna Educação | Senior Software Developer

May 2020 - Jan 2022

Developed web application for managing candidate enrollments, financial system for commissions, and analytical dashboard for performance monitoring. Implemented RESTful API for integration with legacy systems and authentication with multiple access levels.

Key Achievements: - Increased lead conversion rate by 25% through UX improvements in the enrollment process - Reduced commission processing time by 30% with new financial management system - Implemented analytical dashboard that identified optimization opportunities, resulting in 15% increase in enrollments - Designed and implemented scalable architecture handling 10,000+ concurrent users during peak enrollment periods

Technologies: React, Node.js, TypeScript, PostgreSQL, Redis, AWS (EC2, S3, Lambda), Docker, CI/CD, Jest, Cypress

dr.consulta | Senior Software Developer

Jul 2015 - May 2020

Developed complete surgical workflow, medical scheduling system, medical center management, and electronic medical records. Implemented algorithms for optimizing medical schedules, notification system, and integration with payment gateways.

Key Achievements: - Optimized surgical room occupancy by 28% with implementation of intelligent scheduling algorithm - Reduced appointment processing time by 45% with new medical scheduling system - Implemented notification system that decreased appointment no-shows by 30% - Developed integrated electronic medical record that increased physician efficiency by 40% - Architected system that scaled to handle 50+ medical centers and 1,000+ healthcare professionals

Technologies: PHP (Laravel), JavaScript, MySQL, Redis, RabbitMQ, HTML5, CSS3 (Sass), Git, AWS, Docker, REST APIs, Agile/Scrum

Great Place to Work | Software Engineer

Jul 2012 - May 2015

Developed organizational climate survey system, including administrative environment, employee response system, and reporting environment with role-based access control.

Technologies: MongoDB, Node.js, Express, REST API, AWS

ISPM | Software Engineer

Jun 2011 - Jul 2012

Developed network monitoring system and service desk with workflow for service orders.

Technologies: Python (Django), JavaScript, PostgreSQL, MySQL, PHP

Education

Universidade do Grande ABC | Bachelor's in Information Systems | 2007-2011

Certifications

- AWS Certified Solutions Architect - Associate
- MongoDB Certified Developer
- Scrum Alliance Certified ScrumMaster (CSM)
- Google Cloud Professional Data Engineer

Technical Skills

Languages: Python, TypeScript, JavaScript (ES6+), PHP, GO, SQL
Frameworks: React, React Native, Express, Next.js, Laravel, Django, FastAPI
Databases: MongoDB, MySQL, PostgreSQL, Redis, Pinecone, Weaviate, ChromaDB, Qdrant
AI & ML: OpenAI API, LangChain, RAG Systems, Embeddings, LlamaIndex, CrewAI, HuggingFace, Vertex AI
DevOps: AWS (Lambda, EC2, S3, SQS), Docker, Kubernetes, CI/CD, Terraform, GitHub Actions
Others: WebRTC, Socket.io, Microservices, RESTful API, Git, GraphQL, WebSockets

Professional Skills

- Technical leadership and developer mentoring
- Effective communication with technical and non-technical stakeholders
- Creative problem-solving for complex challenges

- Adaptability to new technologies and methodologies
- Analytical and results-oriented thinking
- Project planning and agile methodology implementation

Languages

- Portuguese: Native
- English: Fluent
- Spanish: Intermediate