Eduardo Levy Kairalla

Email: eduardokairalla123@gmail.com
Portfolio: eduardokairalla.com • **GitHub:** github.com/eduardokairalla1 • **LinkedIn:** linkedin.com/in/eduardo-kairalla1

Education

Pontifical Catholic University of Campinas (PUC-Campinas): Bachelor's Degree in Software Engineering
Expected Graduation: Jun 2028
Relevant Coursework: Algorithms and Programming Languages, Data Structures and Retrieval, Object-Oriented Programming, Elements of Linear Algebra, Software Patterns and Architecture, Database Studies, Operating Systems Fundamentals, Artificial Intelligence and Machine Learning

Professional Experience

Backend Software Engineer - VulcaNet Sistemas e Engenharia (Systems and Engineering)
May 2025 - Present

- Designed and implemented from scratch a **complete AI infrastructure** integrated into existing telephony/messaging products, managing the production environment with **99.9% uptime** and monitoring with Grafana, using Python/FastAPI, TypeScript/GraphQL, Docker, LangChain, LangGraph and AI API integrations
- Developed an **event-driven microservices architecture** (EDA) with RabbitMQ and asynchronous messaging, working on queue modeling, producers and consumers, applying patterns such as Outbox Pattern for data consistency, resilience and service decoupling
- Led the microservices architecture design, including a **graph-based chatbot** pipeline (LangGraph), persistent memory system and AI features (BANT analysis, intent classification, transcription, summaries)
- Enhanced the omnichannel product (WhatsApp/Instagram/Facebook/Email) by integrating an intent classification system with 96% accuracy and RAG chatbots, **automating 60% of customer interactions** and drastically reducing response time for thousands of daily users
- Contributed to fullstack development across multiple microservices (Python/FastAPI, Python/Twisted, Node/GraphQL, TypeScript/React), applying software engineering practices with Git, code reviews and agile methodologies (Scrum/Kanban)

Academic Projects

Call-Center System (GitHub)

- Description: Call center system with asynchronous client-server architecture via TCP, supporting multiple simultaneous clients and intelligent call queues
- Technologies: Python, Twisted, Docker, TCP/Sockets, JSON, Git

StockFlow API (GitHub)

- Description: REST inventory management API with blockchain security and auditability via Bitcoin, using SHA-256 hashing and immutable timestamps
- Result: System with product CRUD, movement tracking, permission-based JWT authentication and integrity verification through cryptographic proofs (.ots) anchored on the blockchain

Technical Skills

Languages: Python • JavaScript/TypeScript • Go • C
Frameworks & Libraries: FastAPI • Flask • Twisted • LangChain • LangGraph • GraphQL • React
Tools / DevOps / Databases: SQL / NoSQL • Message Brokers • AWS • Git • Docker • Linux • CI/CD
Architecture & Methodologies: Code Reviews • Microservices • RESTful APIs • GraphQL APIs • Agile (Scrum/Kanban)
Languages: Portuguese (Native) • English (Advanced)