

Matheus Ferraz

Senior Software Engineer | AI & Fullstack Applications | Brazil (Remote)
matheus@ferraz.dev | ferraz.dev | github.com/MFerraz | linkedin.com/in/mtferraz

PROFESSIONAL SUMMARY

Senior Software Engineer and **Electrical Engineer** with 11+ years of experience building high-impact products for startups and global utilities. With experience in **LLM orchestration** (achieving 10x latency reductions), **Power Systems Analysis** (developed fault location tools for Enel), **Full stack and mobile applications**, and **Embedded systems** (FPGA, microcontrollers, IoT). A product-minded engineer who thrives in high-autonomy environments, bridging the gap between hardware telemetry and cloud-based AI toolkits.

CORE TECHNICAL SKILLS

AI & Data: LLM Multi-agent Systems, RAG, Prompt Engineering, Neo4j (Graph Data), Vector Pipelines.

Full Stack: TypeScript, Node.js, Fullstack Frameworks (SvelteKit), SQL, MongoDB.

Mobile: Flutter, native plugins, BLE communication.

Diversified Domain Expertise: Power Grid Analysis (Short-circuit calculations, fault location), IoT/BLE Telemetry, CRM, AI Assistants, Shoppable Video, Embeddable Widgets.

Infrastructure: GCP, AWS, GitHub Actions, CI/CD.

PROFESSIONAL EXPERIENCE

Senior Software Engineer | Zellor (Ireland/Remote) 2021 — Present

- LLM Infrastructure:** Redesigned a monolithic LLM agent into a hybrid multi-agent architecture, **reducing response latency from ~20s to ~2s** through streaming and context optimization.
- AI Commerce Integration:** Developed a deep Shopify integration using the MCP (Model Context Protocol) to allow LLMs to reason over live product catalogs and video metadata.
- Product Ownership:** Partnered with stakeholders to deliver rapid PoCs for shoppable video widgets, directly enabling three strategic product pivots in a high-growth environment.

Software Engineer | Equimetrics (Ireland/Remote) 2022 — 2022

- IoT & Telemetry:** Built a real-time ECG visualization pipeline using Flutter and Dart, processing raw binary streams from BLE devices at high frequencies.
- Native Engineering:** Developed custom Swift (iOS) and Kotlin (Android) plugins for ESP32 Wi-Fi provisioning, ensuring production readiness without prior physical hardware access.

Lead Engineer | Current (Power Systems Tool) 2020 — 2021

- Utility-Scale Engineering:** Developed a grid-analysis platform for **Enel** (Global Power Utility). Utilized **Neo4j** to visualize massive circuits and calculate **fault locations and short-circuit currents**.
- Visual Architecture:** Built a Svelte web application featuring interactive maps and equipment detail visualization for field engineers.

Lead Engineer | Seed CRM 2020 — 2021

- Financial Impact:** Architected an agricultural CRM that successfully handled **R\$170M in transactions** within its first year, focusing on data integrity for non-technical users.
- Offline data:** Designed a robust desktop app that was able to work offline and sync with the cloud when possible.

Tech Lead | Musicplayce (Brazil) 2019 — 2020

- Leadership:** Led a 4-person engineering team to build a mobile marketplace connecting songwriters and artists using Flutter and Node.js.
- Mentorship:** Established high standards for autonomous problem-solving, successfully mentoring junior staff into senior leadership roles.

EDUCATION & TRAINING

- B.S. Electrical and Electronic Engineering** | UFG (Brazil)
- International Exchange (Intelligent Systems)** | Brunel University London (UK)
- Microelectronics Training:** Intensive 1-year program; designed digital IC components for satellite signal processing.
- Continued Learning:** Attention Management Mentorship (2025), Neo4j Certification.

LANGUAGES

- Portuguese:** Native
- English:** Bilingual