

Cristi Miloiu

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TECHNICAL SKILLS

AI & Backend: LLMs, AI Agents, RAG, Langfuse, Python, FastAPI, PostgreSQL, MongoDB, Redis

Web & Cloud: TypeScript, React, Next.js, Tailwind CSS, Docker, AWS, Grafana, Cloudflare

Dev Tools & Productivity: Jira, Confluence, Slack, GitHub, Postman, TablePlus, Cursor

EXPERIENCE

Software Engineer

Genezio

Sept 2023 – Present

Bucharest, Romania

- Core member of the team that secured a **€2M pre-seed round** for a **serverless cloud platform**, later pivoting to develop **LLM brand visibility** and **enterprise AI agent testing** solutions.
- **Owner & Maintainer** of the backend and agents codebase, delivering **5000+ contributions** last year.
- Architected the **RBAC system using Casbin** to handle secure permissions and multi-account management.
- Built the **daily simulation engine** that executes user-defined scenarios and captures comprehensive interaction data.
- Implemented the **Metrics infrastructure** with robust **caching** for real-time analytics.
- Engineered **Red/Blue Team Agents** to simulate adversarial attacks and automate functional testing.
- Orchestrated **platform releases**, ensuring stability and quality assurance in production.
- Led **interviewing, onboarding, and mentorship** for interns/juniors, enforcing high code quality standards.
- **Technical Skills:** Python, FastAPI, PostgreSQL, MongoDB, Redis, React, Tailwind CSS, AWS, S3, Langfuse, Grafana, Docker

Full Stack Intern

Genezio

June 2023 – August 2023

Bucharest, Romania

- Enabled **CLI deployment** for **Lambda Functions** and **FastAPI**, directly streamlining developer workflows.
- Migrated **Next.js deployment** from OpenNext to a native solution, improving scalability and simplicity.
- Designed a **RAG system** using OpenAI & LangChain for context-aware Q&A on company documentation.
- Integrated the system into a **Discord bot** with **automated CI/CD** workflows using CircleCI.
- **Technical Skills:** Python, LangChain, OpenAI API, Next.js, FastAPI, Discord API, CircleCI

Technical Coordinator

League of Electronics Students (LSE)

Oct 2022 – July 2024

Bucharest, Romania

- Managed the **IT Department**, training volunteers in **web development fundamentals** and **GitHub** workflows.
- Delivered key web applications: **LSE București** (organization website), **APV** (charitable cross-country platform, **500+ users**), **BBETTI** (voting platform, **1,000+ users**), and **Laundry Reservation** (**700+ users**).
- **Technical Skills:** JavaScript, TypeScript, React, Node.js, GitHub, Tailwind CSS, PostgreSQL, Sequelize

System Engineering Intern

Huawei Enterprise GSC

July 2022 – Sept 2022

Bucharest, Romania

- Worked with enterprise storage protocols (SAN/NAS, RAID) and Linux server administration.
- **Technical Skills:** Linux, SAN/NAS, RAID, Enterprise Server Administration

EDUCATION

National University of Science and Technology Politehnica Bucharest

M.Eng. in Information and Computing Systems Engineering

Bucharest, Romania

Oct 2025 – Present

Faculty of Electronics, Telecommunications and Information Technology

- **Dissertation (WIP):** Information Visibility in the Age of LLMs

National University of Science and Technology Politehnica Bucharest

B.Sc. in Computer Science

Bucharest, Romania

Oct 2021 – July 2025

Faculty of Electronics, Telecommunications and Information Technology

- **Bachelor Thesis:** Automatic Generation of REST and GraphQL API Interfaces using LLMs

PROJECTS

Bachelor Project - AI Agent System <i>Python, FastAPI, React, MongoDB, Gemini, AWS, Docker</i> <ul style="list-style-type: none">• Built a multi-agent system using Google Gemini and an LLM Provider Factory to generate REST/GraphQL APIs.• Architected the backend with FastAPI and MongoDB, employing Agent Factory patterns and SSE for real-time streaming.• Integrated automated deployments via Genezio and Langfuse for observability and cost analysis.	May 2024
Personal Portfolio Website <i>Next.js, React, Tailwind CSS, Vercel, Cloudflare</i> <ul style="list-style-type: none">• Developed a modern, high-performance portfolio website using Next.js and Tailwind CSS.• Optimized for speed and security, deployed on Vercel with Cloudflare for DNS management.	Oct 2024
Audio Analysis Platform <i>Hardware, ESP32, FastAPI, React, WebSocket, Signal Processing</i> <ul style="list-style-type: none">• Engineered a hardware system integrating ESP32, Pre-Amp, and Microphone for real-time audio processing.• Implemented FFT analysis, digital filtering, and streamed data via WebSockets to a React dashboard.	Jan 2024
Facial Emotion Recognition <i>Python, PyTorch, Vision Transformers (ViT), Streamlit, Docker</i> <ul style="list-style-type: none">• Built a high-performance FER system using Vision Transformers (ViT) fine-tuned on a custom dataset.• Implemented advanced optimization techniques: Mixup, Label Smoothing, and Test Time Augmentation (TTA).	Jan 2024
Comparative Modeling Environments <i>Rust, Go, C++, Python, Rayon, OpenMP, NumPy</i> <ul style="list-style-type: none">• Simulated fire propagation using Cellular Automata to benchmark High Performance Computing (HPC) approaches.• Compared parallelism models: Rayon (Rust), Goroutines (Go), std::thread (C++), and NumPy (Python).	Dec 2023

AWARDS

3rd Place – Scientific Communications Session: Bachelor Thesis <i>National University of Science and Technology Politehnica Bucharest</i> <ul style="list-style-type: none">• Awarded for the final implementation of the “Automatic Generation of REST and GraphQL API Interfaces using LLMs”.	May 2025
4th Place – Scientific Communications Session: API in Seconds <i>National University of Science and Technology Politehnica Bucharest</i> <ul style="list-style-type: none">• Awarded for the initial prototype of the AI-driven backend generation platform.	May 2024
1st Place – Electron Hackathon: Electrify the Campus <i>LSE Bucharest, Romania</i> <ul style="list-style-type: none">• Developed a Smart Campus parking solution using YOLOv5 for license plate detection and EasyOCR for text extraction.• Integrated an automated barrier system using ESP32 and a MySQL database for real-time access control.	May 2023
2nd Place – Scientific Communications Session <i>National University of Science and Technology Politehnica Bucharest</i> <ul style="list-style-type: none">• Built a stolen car finding mobile app using YOLOv3 and color transformation algorithms for license plate recognition.• Implemented specific image processing pipelines with OpenCV and geolocation tracking via email alerts.	May 2023

VOLUNTEERING

Mentor <i>Innovation Labs</i> <ul style="list-style-type: none">• Mentoring early-stage startups on technical architecture, product scalability, and MVP development strategies.	Mar 2025 – Present <i>Bucharest, Romania</i>
Board Member <i>League of Electronics Students (LSE)</i> <ul style="list-style-type: none">• Representing students in the Board of Members, ensuring their concerns are addressed in decision-making processes.• Developed Risk Management and strategic planning skills through organizational leadership.	Oct 2023 – 2024 <i>Bucharest, Romania</i>
Student Representative <i>National University of Science and Technology Politehnica Bucharest</i> <ul style="list-style-type: none">• Acted as a bridge between the student body and faculty administration, advocating for academic improvements.	Dec 2022 – 2024 <i>Bucharest, Romania</i>