

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 Bucuresti** (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

Faculty of Electronics, Telecommunications and Information Technology

Bucharest, Romania

Oct 2025 – Present

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

National University of Science and Technology Politehnica Bucharest

B.Sc. in Computer Science

Faculty of Electronics, Telecommunications and Information Technology

Bucharest, Romania

Oct 2021 – July 2025

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

PROJECTS

Bachelor Project - AI Agent System	May 2024
<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.	
Personal Portfolio Website	Oct 2024
<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.	
Audio Analysis Platform	Jan 2024
<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.	
Facial Emotion Recognition	Jan 2024
<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).	
Comparative Modeling Environments	Dec 2023
<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).	

AWARDS

3rd Place – Scientific Communications Session: Bachelor Thesis	May 2025
<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".	
4th Place – Scientific Communications Session: API in Seconds	May 2024
<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.	
1st Place – Electron Hackathon: Electrify the Campus	May 2023
<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.	
2nd Place – Scientific Communications Session	May 2023
<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.	

VOLUNTEERING

Mentor	Mar 2025 – Present
<i>Innovation Labs</i>	
<ul style="list-style-type: none">• Mentoring early-stage startups on technical architecture, product scalability, and MVP development strategies.	
Board Member	Oct 2023 – 2024
<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.	
Student Representative	Dec 2022 – 2024
<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.	