Luca Matei

📞 +40 771 344 046
✉ hello@lucamatei.eu
🌐 https://lucamatei.eu
📍 Turnhout, Belgium

in lucamatei
○ luca-matei
✈ lucamatei

Summary

Seasoned impact-driven engineer with over 8 years of experience, recently collaborating with SaaS startups on a B2B basis. Designed and built high-traffic solutions while leading system development for AI-driven and scraping-based e-commerce products across global, agile teams. Creator of open-source IaC tool, WSGI web framework, and utility-first CSS library. Authored technical guides for a wide array of DevOps, networking and cybersecurity software. Guided students and junior developers in LLMs, web and game development, and procedural programming. Open-source contributor to Pydantic.

Desired roles   Senior / Middle AI Engineer or Full Stack Engineer

Tech Stack   Python, FastAPI, TypeScript, Next.js, PostgreSQL, Redis, AWS, Linux

Experience

Senior Full Stack Engineer

Jun 2023 - Sep 2025 · 2y 4mo
Remote, Self-employed
Worldwide

Python, FastAPI, TypeScript, Next.js, PostgreSQL, Redis, Linux

- Built prototypes for Venture Capitalist (VC) companies
- Contributed to the Pydantic and pptx2md libraries
- Invited speaker on AI at a Packet Coders event
- Provided private tutoring on Large Language Models (LLMs) and web development
- Authored open-source learning materials
- Managed websites, private Virtual Private Servers (VPSs) and DNS servers
- Worked with companies in US, UK, Switzerland, The Netherlands, Germany, Estonia

Senior AI Engineer

getitAI, Inc.
Oct 2023 - May 2025 · 1y 8mo
Remote, Contract
San Francisco, California, United States

Python, FastAPI, TypeScript, Next.js,

- Performance: Rewrote a multi-modal Retrieval-Augmented Generation (RAG) system using Redis Stack, reducing query response times from 300ms to under 12ms. Integrated keyword search, semantic search, metadata filtering, chunk joining, and query optimization
- Backend: Built asynchronous API infrastructure in Python using FastAPI, Postgres, Redis, SQLAlchemy, asyncio, and aiohttp.
- LLM Tools: Created tools allowing e-commerce actions like cart management, subscription handling, and order processing.

PostgreSQL, Redis,
Shopify, AWS, Clickhouse

- Knowledge System: Designed an LLM-agnostic knowledge ingestion pipeline with interfaces integrated into the Next.js application. Can ingest files, web pages, Shopify products.
- Shopify Integration: Created a custom Shopify block for store integration and built pipelines to handle real-time updates for over 6,000 products and 150,000+ daily transactions across multiple stores.
- Scalability: Designed a user rollout system with geo-filtering and planned solutions for custom client requirements during onboarding.
- Testing and CI/CD: Created the first unit test suite and CI/CD pipeline to validate pull requests before merging.
- Team Coordination: Worked closely with RevOps team to align business and software goals. Occasionally led daily meetings, coordinated 2-3 developers on projects, and managed production deployments.
- Documentation and Modularity: Reduced development time through modular architecture and improved onboarding with detailed documentation.
- Technical Support: Acted as the go-to engineer for resolving critical issues and implementing new features.

Python Developer with DevOps

Signed NDA
Jul 2023 - Apr 2024 · 10mo
Remote, Contract
European Economic Area

Python, FastAPI,
PostgreSQL, Redis, Linux,
HAProxy, Docker

- Reconstructed and launched a multi-server system to process high-volume custom user requests
- Rebuilt the API's core structure, improving speed, stability, and expandability
- Designed and implemented a comprehensive credits system for the API, integrating with external subscription services
- Established and managed essential infrastructure including CI/CD pipelines, load balancers, and databases
- Maintained servers to ensure security and minimize downtime

Python Developer with DevOps, Instructor

Sep 2017 - Jun 2023 · 5y 10mo
Hybrid, Freelance
Bucharest, Romania

- Created configuration guides for over 10 software products
- Ran web development workshops for 25+ students twice a week
- Tutored 15+ students in web development and procedural programming
- Built dozens of websites, blogs, galleries in Flask, Django and bottle.py with Bootstrap, jQuery, and vanilla JS, HTML, CSS
- Built software for DevOps, networking and security products

Projects

Available on lucamatei.eu/projects.

Digital Marmot / Dima

This project was developed before the use of large language models in programming and before I discovered Ansible and TailwindCSS.

This tool is a complete Python-based solution for building and deploying virtual machines, networks, and web apps in a home lab. It features a command line interface with history and a Tkinter GUI, offering over 65 commands.

It can configure and manage Git repositories, uWSGI servers, Nginx web servers, Let's Encrypt SSL certificates, system services, Bind DNS servers, DHCP servers, SSH keys, GPG keys, PostgreSQL servers, nftables firewalls (with geo-blocking and port knocking), development, staging, and production environments, as well as preseed Debian virtual machines. Configurations are based on a custom templating system, with every setting carefully selected by me.

Websites are built on a custom web framework based on the WSGI application. They support multilingual content using a YAML-based CMS for managing static, blog, and gallery content.

The frontend of the websites uses a SCSS-based library for multimedia structure, spacing, color palettes, UI components, and animations.

OSRAM Products Redis RAG

This conversational interface uses a Redis-powered RAG to search and present technical information from OSRAM product specification PDFs. The hybrid search system presents complex document data in a natural, chat-based format, making product specifications instantly accessible to users.

#PayWhatYou-ThinkItsWorth

I offer personalized software consultancy services for projects, career guidance, and startup planning with a unique value-based pricing model. You determine what to pay based on the tangible impact our session creates for you. My client-first approach ensures you only invest what matches the value you receive.

Mentorship Programs

I teach hands-on programming and web development projects to help students and junior developers master essential skills. My interactive portfolio includes games like Snake and Hangman, practical tools such as Password Managers, and full-stack applications like URL Shorteners with API integration.

Education

Self-taught programming for 14 years.

Certifications

Certified Scrum Master through Scrum Alliance
Accountant through APSAP (Romania)

High School

Colegiul Național "Mihai Viteazul" București
Mathematics and Computer Science