Vlad-Emil Flore

Software Engineer

DETAILS

✉ flore.vlad@gmail.com

📍 Barcelona

🎂 15.11.1985

🌐 Romania

🚩 Romanian

EDUCATION

Master of Science in Informatics

West University of Timișoara

2008 — 2010

Focus on Artificial Intelligence and Distributed Computing

Grade: 9 of 10

Bachelor of Science in Informatics

West University of Timișoara

2004 — 2008

Grade: 9.67 of 10 (ranked 7 of 95 graduates)

PROFILE

- Backend Software Engineer specializing in Java and Python, building scalable, cloud-native applications and modernizing complex legacy systems

- Versatile project experience including greenfield and brownfield initiatives in public sector services, content management systems, and intelligence document processing solutions

- Proven leader in agile development environments, driving team collaboration, ensuring code quality, and meeting project deadlines

EMPLOYMENT HISTORY

Independent Software Engineer

January 2025 - present

- Design and implementation of LLM- and RAG-based systems for document understanding and question answering
- Development of autonomous agentic workflows for online content generation and curation
- End-to-end machine learning pipeline development from data preprocessing to model deployment
- Multimodal AI applications integrating text, image, audio, video, and vector search capabilities
- Create educational software engineering content with a focus on Java and the JVM ecosystem

LANGUAGES

Romanian (native)

English (C1)

German (B2)

Spanish (A2)

SKILLS

</> Programming Languages (Java, Python)

🤖 Machine Learning and Generative AI

🧪 Testing (JUnit, Mockito, AssertJ, Pytest, Testcontainers)

🛡 Coding Practices (Clean Code, TDD, SOLID)

🖥 Web API (RESTful APIs, GraphQL, OpenAPI, Swagger, PostGraphile)

⚙ Web Frameworks (Spring Framework, Spring Boot, Django, FastAPI)

🗄 Microservices & Cloud-Native Architecture

💬 Messaging and Event-Sourcing Systems (RabbitMQ, EventStoreDB)

🗄 Databases & ORM (PostgreSQL, Oracle, (Spring Data) JPA/Hibernate, SQLAlchemy)

☁ Cloud (AWS, Kubernetes, Keda, Docker)

Tech Stack: Java, Python, PyScript, NumPy, Pandas, FastAPI, Streamlit, Weaviate, PostgreSQL (with pgvector), Generative AI (LLM, RAG, Agentic Workflows), LangChain, Ollama, OpenAI Platform, Pydantic AI, Spring AI, Docker, Kubernetes, AWS (EC2, S3, IAM, Lambda, ECR, ECS, EKS)

Software Engineer

ExB Group, Remote (Nürnberg, Barcelona)

March 2021 — November 2024

- Implemented key features in Java and Python within a microservices-based architecture for a web-based Intelligent Document Processing solution
- Designed and developed scalable, decoupled microservices in Java and Python, enhancing system robustness and performance (documents upload, archiving and download, image processing, REST and GraphQL APIs, notifications, AI models deployment)
- Leveraged Kubernetes for efficient deployment, scaling, and orchestration of services in a cloud-native environment
- Contributed to architectural improvements of key components within the processing pipeline
- Led internal technical workshops focused on clean code principles and improving overall code quality
- Conducted regular code reviews and participated in pair programming to foster collaboration and knowledge sharing
- Advocated for tooling and workflow improvements to streamline the developer experience and reduce friction in daily tasks
- Built a process for automated generation of technical documentation using AsciiDoc and Antora

Tech Stack: Python, Java, Django, Spring Framework, Spring Boot, Akka, GraphQL, PostGraphile, PostgreSQL, EventStoreDB, RabbitMQ, Docker, Kubernetes, Helm, Keda, AWS S3, MinIO, AWS ECR, AWS ECS, AWS EKS, Git, GitLab, TeamCity, Argo CD, Grafana, AsciiDoc, Antora, Linux, JUnit

- 🔧 Build Tools (Maven, Gradle, Bazel)
- 🚀 CI/CD (Git, GitHub, GitHub Actions, GitLab, TeamCity, Argo CD, Jenkins, Helm, Ansible)
- 👥 Team Leadership & Mentoring
- 🖥 Technical Documentation & Knowledge Sharing

LINKS

- 🐙 GitHub
- 🔗 LinkedIn
- 🌐 Personal Website

Educational Content Creator

Hyperskill, Remote (Barcelona)

October 2023 — March 2024

- Created and enhanced educational content for the Spring Boot track offered by JetBrains Academy through the Hyperskill platform, contributing to high-quality, hands-on learning experiences for aspiring developers

> **Tech Stack:** Java, Spring Framework, Spring Boot

Lead Software Developer

IT-Systemhaus der Bundesagentur für Arbeit, on-site (Nürnberg)

September 2019 — April 2020

- Served as Lead Developer for one of two agile development teams, guiding technical direction and team collaboration
- Defined and evolved the application's architecture to support scalability and maintainability
- Promoted clean code and consistent development practices to maintain code quality
- Collaboratively decomposed features into manageable tasks, ensuring effective sprint planning and delivery
- Implemented and tested application features across the full stack, maintaining close alignment with business requirements

> **Tech Stack:** Java SE 8, Java EE 7, Angular, Angular Material, TypeScript, JavaScript, JUnit, Cucumber, Jenkins, Docker, Linux, Oracle Database, Git

Full Stack Developer

Bundesamt für Migration und Flüchtlinge (BAMF), on-site (Nürnberg)

May 2018 — September 2019

- Implemented features across both frontend and backend of a web application
- Improved and maintained project documentation to support developer onboarding and knowledge sharing
- Managed DevOps-related tasks and supported deployment activities to ensure smooth delivery and system stability

> **Tech Stack:** Java SE 8, Spring Framework, Spring Boot, JUnit, Angular, TypeScript, JavaScript, Ansible, Jenkins, Docker, Oracle Database, Hibernate, Linux, Git

Software Developer

IT-Systemhaus der Bundesagentur für Arbeit, on-site (Nürnberg)

May 2014 — February 2018

- Developed a publishing workflow for web content within Oracle CMS, streamlining the content creation and approval process
- Extended the CMS by implementing custom tools and features to support efficient content management and improve the user experience for content editors

> **Tech Stack:** Oracle WebCenter Content, Java, HTML, CSS, JavaScript, Oracle Database, Linux, CVS, Git

Senior Technical Consultant

virtual7 GmbH, on-site (Nürnberg)

February 2019 — May 2020

- Delivered software solutions across various client projects as part of agile development teams
- Implemented new features, resolved bugs, and participated in the full SDLC
- Acted as a software consultant, adapting quickly to different domains and tech stacks

> **Tech Stack:** Java, Java EE, JavaScript, HTML, CSS, Angular, Oracle Database, Oracle WebCenter Content

Senior Technical Consultant

virtual7 Romania, on-site (Timișoara)

May 2014 — January 2019

- Delivered software solutions across various client projects as part of agile development teams
- Implemented new features, resolved bugs, and participated in the full SDLC
- Acted as a software consultant, adapting quickly to different domains and tech stacks

> **Tech Stack:** Java, Java EE, JavaScript, HTML, CSS, Angular, Oracle Database, Oracle WebCenter Content

Software Developer

virtual7 Romania, on-site (Timișoara)

February 2008 — April 2014

- Contributed to diverse software projects across multiple industries
- Participated in the development of software solutions in a range of domains

> **Tech Stack:** Java, Java EE, ORM, JavaScript, HTML, CSS, Oracle Database, Oracle WebCenter Content