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Experience

Adobe

01/2025 – Present

Software Engineer

Bucharest

- Integrated **AWS Bedrock Claude** into the **Agent Orchestrator** using **LiteLLM**, designing a multi-cloud LLM abstraction with cloud provider specific defaults and validating **Claude** configurations against **Azure OpenAI** baselines through routing performance analysis and regression testing.
- Prototyped pre-inference prompt validation using **Bedrock Guardrails** and **Azure AI Content Safety** to detect banned words and sanitize unsafe user inputs before model execution.
- Contributed to re-architecting a **Retrieval-Augmented Generation (RAG)** ingestion system, transitioning a single synchronous service into an event-driven **Kafka** pipeline of three decoupled microservices (ingestion, chunking, and embedding) for reliable large-file processing and independent scaling.
- Designed and built a cloud-agnostic storage handler library that routes documents to **Azure Blob Storage** or **AWS S3** based on the service cloud provider, later serving as the storage layer for the **Manifest Configuration Service**.
- Designed REST APIs to ingest and index multiple document types (PDF, Markdown, plaintext) using **Sentence Transformers** and **OpenAI** embedding models.
- Contributed to **Agent Orchestrator** by developing tenant-level configuration and sharing workflows for **Brand Concierge** using A2A Manifests and Agent Cards, facilitating broader customer adoption.
- Enhanced the **Manifest Configuration Service** by building an async blob-to-blob migration tool that upgrades legacy cloud stored manifests to typed code schemas during service startup.
- Built a **Jenkins** PR validation pipeline for A2A manifest changes, publishing the manifests to **Azure Blob Storage**, provisioning ephemeral **Agent Orchestrator** environments, and running pre-merge regression suites.
- Deployed and managed services on AWS and Azure Kubernetes (**ArgoCD**, **Helm Charts**), overseeing rollouts, end-to-end validations, scaling, monitoring, and incident response (**Prometheus**, **Grafana**).
- Participated in on-call rotations to quickly diagnose and resolve production incidents across multiple services, maintaining high system reliability and ensuring seamless feature rollouts.
- Mentored engineers and led knowledge-sharing sessions across the team.
- Utilized technologies including Python, FastAPI, Apache Kafka, PostgreSQL, Redis, Kubernetes across AWS and Azure, vector databases, Jenkins for CI/CD, Prometheus and Grafana for metrics and monitoring, LiteLLM, LangChain, and OpenAI Agents SDK for LLM orchestration.

Adobe

07/2024 – 12/2024

Software Engineer Intern

Bucharest

- Led comparative POCs of vector databases (**Pinecone**, **Milvus**, **pgvector**) for storing document embeddings, assessing query performance, scalability, and operational overhead.
- Implemented **Kafka/PostgreSQL** health-check monitoring wired into **Kubernetes** readiness probes, async end-to-end tests, and document retention/delete policies across **Azure Blob Storage** and **AWS S3**.
- Built multiple **Jenkins** pipelines to publish shared **Python** libraries to internal package registries, with automated version-bump on release.

eSolutions

10/2022 – 04/2024

Software Engineer

Bucharest

- **Roomio**: Developed features for a workspace-booking platform covering meeting rooms, desks, parking spaces, shared spaces, and visitor self-registration, implementing backend functionality with **Java**, **Spring Boot**, and **PostgreSQL**, and frontend flows with **JavaScript**, **HTML**, and **CSS** for reservations, availability views, and admin management.
- **Trax**: Developed backend business logic and UI improvements for an internal employee and project-management platform using **Java**, **Spring Boot**, **Spring Security**, **REST**, **PostgreSQL**, and **Redis**, adding features that improved visibility into company operations.

eSolutions

07/2022 – 10/2022

Software Engineer Intern

Bucharest

- Designed and developed an internal project-estimation web application that translated requirement inputs into structured implementation-effort calculations for software delivery planning.

Education

University POLITEHNICA of Bucharest

10/2024 – 07/2026

Master's Degree in Computer Science, Faculty of Automatic Control and Computer Science

Bucharest

University POLITEHNICA of Bucharest

10/2020 – 07/2024

Bachelor's Degree in Computer Science, Faculty of Automatic Control and Computer Science

Bucharest

Relevant Coursework

Master's: Artificial Intelligence, Multi-Agent Systems, Information Retrieval, Advanced Intelligent Web Systems, Advanced Web Technologies, Architectural Styles and Software Design Patterns, Distributed Internet Processing.

Bachelor's: Data Structures and Algorithms, Object-Oriented Programming, Programming Paradigms, Communication Protocols, Algorithm Design, Operating Systems, Parallel and Distributed Algorithms.

Projects

ByteSchool.ro | *TypeScript, React, Next.js, Convex, Judge0* **04/2026 – 06/2026**

- Developed an interactive programming learning platform for high school students, combining lessons, quizzes, visual exercises, and game-based challenges into a single learning experience.
- Designed the full-stack application with **Next.js**, **React**, **TypeScript**, and **Convex**, covering authentication, user management, data storage, and real-time state updates.
- Integrated the **Judge0 API** to run and evaluate code submissions across multiple programming languages.
- Built a custom interaction framework that maps students' program output to live UI changes, allowing code to control games, visualizations, and other learning components.
- Implemented role-based access control and administrative dashboards for managing users, groups, bookings, and courses.

Daily Dose Of Code | *Java, Spring Boot, Vue.js, OpenAI, Whisper, Stripe, Firebase, Docker* **10/2023 – 07/2024**

- Built a coding interview preparation platform with structured practice, an in-browser coding environment, and real-time AI guidance through text and voice interactions.
- Implemented multi-language code execution through a **Java Spring Boot** microservice that runs user submissions inside isolated **Docker** containers.
- Integrated **OpenAI** and **Whisper** to provide contextual coding assistance, voice input, and feedback during problem-solving sessions.
- Developed user and admin panels with role-based authentication and access control using **Firebase**.
- Integrated **Stripe** subscriptions to manage premium access to AI assistance and structured programming courses.

MyGPT | *Java, Spring Boot, PostgreSQL, OpenAI, HTML, CSS, JavaScript, Mustache* **08/2023 – 10/2023**

- Built an AI chat application with a **Java Spring Boot** backend and **PostgreSQL** for storing users, chats, and message history.
- Integrated the **OpenAI API** to generate assistant responses using previous messages as conversation context.
- Developed the frontend with **HTML**, **CSS**, **JavaScript**, and **Mustache** templates, including chat management and multi-account support.

Skills

Languages: Python, Java, TypeScript/JavaScript, Bash, HTML/CSS

Backend: FastAPI, Spring & Spring Boot, SQLAlchemy, Alembic, PostgreSQL, Redis, Apache Kafka

Frontend & Platforms: React, Next.js, Vue.js, Convex, Firebase, Mustache

AI / LLM: RAG, embeddings, semantic search, vector databases, OpenAI API, Sentence Transformers, AWS Bedrock, Anthropic Claude, Azure OpenAI, LiteLLM, OpenAI Agents SDK, Bedrock Guardrails, Azure AI Content Safety, Whisper

Cloud & DevOps: AWS, Azure, Kubernetes, Docker, Argo CD, Helm, Azure Blob/File Storage, AWS S3, Jenkins

Tools & Observability: Prometheus, Grafana, Git, Judge0, Stripe

Extracurricular

Private Tutor **10/2021 – 06/2023**

- Prepared high school students for the Bacalaureat (BAC) exam, helping them understand C++ and core programming concepts.