

# Dancau Sebastian

sebastian.dancau.net

Email : sebastian@dancau.net

Mobile : +40769961100

## SUMMARY

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Software Engineer with 5+ years of experience building backend systems, distributed platforms, and cloud infrastructure. Strong background in Python and Java, designing scalable REST APIs and high-throughput services. Hands-on experience with Docker, Kubernetes, CI/CD pipelines, and infrastructure as code across AWS and DigitalOcean. Focused on system design, reliability, performance optimization, and automation.

## EDUCATION

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| <b>University of Bucharest</b>          | Bucharest, Romania    |
| • <i>Master of Software Engineering</i> | Oct. 2023 – Jul. 2026 |
| <b>University of Bucharest</b>          | Bucharest, Romania    |
| • <i>Bachelor of Computer Science</i>   | Oct. 2020 – Jul. 2023 |

## EXPERIENCE

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| <b>Stone Soup Tech</b>      | Bucharest, Romania  |
| • <i>Software Developer</i> | Jan. 2022 - Present |
- **Backend Development:** Designed and implemented backend systems and services using Python and Java.
    - **REST API for Trading:** Designed and implemented high-throughput REST APIs for trading platforms using Python, focusing on reliability and secure integrations.
    - **No-Code Software Testing Solution:** Designed and built a distributed no-code testing platform for web and API applications. Implemented graph-based test generation, traversal, and optimization algorithms. Built a scalable runner-controller architecture enabling parallel execution across environments. Integrated LLM-powered mapping tools to simplify test creation and application onboarding.
    - **Online Showroom:** Created internal analytics and reporting features. Contributed to various features and enhancements to the platform.
    - **Multi-Level Dropshipping Solution:** Integrated backend systems with third-party e-commerce platforms such as Walmart and Ecwid, enabling multi-channel bi-directional order and inventory synchronization.
    - **Online Store:** Designed and built the backend system from scratch, including inventory and order synchronization, payment processing, kiosk functionality, and security features.
    - **AI Chatbots:** Developed LLM-powered chatbots for multiple use cases using both hosted APIs and self-hosted models. Fine-tuned models and implemented Retrieval-Augmented Generation (RAG) pipelines.
    - **Anti-piracy solution:** Built web scraping and monitoring systems using Python and JavaScript to detect unauthorized use of media content across multiple platforms.
  - **DevOps:** Designed, deployed, and maintained production-grade infrastructure and deployment pipelines.
    - **CI/CD:** Designed and maintained CI/CD pipelines across GitHub, GitLab, and Bitbucket, improving deployment reliability and speed.
    - **Containerization:** Dockerized multi-module applications to ensure consistent builds and deployments across environments.
    - **Orchestration:** Designed and operated high-availability architectures using Kubernetes and Docker Swarm.
    - **Cloud Infrastructure:** Provisioned and managed cloud infrastructure on AWS, DigitalOcean, and Hetzner using Terraform and Ansible.
    - **Webinar:** Hosted a Docker webinar internally to introduce team members to the new architecture and to share best practices.
    - **Infrastructure:** Implemented monitoring, logging, analytics, access-control, authentication, and TLS certificate management for production systems.
  - **Media Server Development:** Development using Wowza on-prem and custom java libraries
    - **Multi-tenant:** Designed and implemented a multi-tenant media server architecture using Wowza and custom Java libraries.
    - **Audio-Video Processing:** Implemented real-time video processing features including green screen removal, color correction, alpha boundary handling, and performance optimizations. Built pipelines for encoding, transcoding, recording, stream composition, and multi-stream aggregation.
    - **Media Protocols:** Built a WebSocket manipulation solution to ensure compatibility with most devices.
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| <b>Stone Soup Tech</b>            | Bucharest, Romania    |
| • <i>Junior Android Developer</i> | Oct. 2021 - Jan. 2022 |

- **Food Waste Solution:** Migrated production Android applications from Java to Kotlin.
- **Tech Exposition Application:** Designed and implemented flyer templates. Developed additional features to improve the user experience.
- **Jetpack Compose:** Worked with Jetpack Compose and modern Android architecture components.

#### Stone Soup Tech

- *Android Developer Internship*

Bucharest, Romania  
Jul. 2021 - Oct. 2021

- **Java, Kotlin:** Contributed to Android applications using Java and Kotlin, implementing features and fixes across multiple mobile projects.

## PROJECTS

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- **Homelab:** Designed and operated a production-like homelab environment using Proxmox and multiple mini PCs. Implemented containerized services, networking, and centralized monitoring following real-world production practices. Built a network setup, implemented service isolation, observability, and automated deployments.
- **Blockchain Voting Platform:** Electronic voting system based on blockchain technology, aiming to offer a secure, transparent and scalable alternative to traditional electoral processes. The system addresses both the needs of modern democratic societies and current technological challenges by integrating advanced components of security, auditability and voter anonymity.
- **Livestreaming platform with client-side encoding:** Integrates existing functionalities of similar solutions while introducing new features designed to assist content creators. Key features of the platform include green screen removal, overlays, media composition, and support for multiple sources.

## TECHNICAL SKILLS

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**Languages:** Python, Java, JavaScript, HTML, CSS

**Backend & Systems:** REST APIs, Distributed Systems, Flask, FastAPI, SQLAlchemy, Quarkus, Selenium, WebSockets, RabbitMQ, Multithreading

**DevOps & Cloud:** Docker, Kubernetes, CI/CD, Terraform, Ansible, AWS, DigitalOcean, Hetzner, Grafana, Prometheus, ELK, InfluxDB, Bash Scripting, Authelia

## ACHIEVEMENTS, TRAININGS AND EXPERIENCES

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- **National Olympiad of Technology and Information 2019:** Qualified for the national olympiad and obtained bronze medal.
- **IC3 Digital Literacy Certification:** Certified in core digital literacy skills including computing fundamentals, online collaboration, and information security.
- **Erasmus exchange program:** Lived abroad as part of an international exchange program, strengthening cross-cultural communication and adaptability.
- **Volunteering:** Helping people with Down's syndrome and blind person