# Sergiu Vlad

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Senior Software Engineer

Machine Learning | Infrastructure Security | Automotive

#### **ABOUT ME**

I am a Senior Software Engineer (python) with over 15 years of experience, skilled in both backend and frontend development. In the last years I focused on cloud infrastructure and ML. I have a deep passion for reverse engineering.

#### ALTERNATIVE SKILLS

Linux (10+ years), Bash Scripting (10+ years), php (15+ years), Cloud (AWS/Google/Azure)(5+ years), ML/Al (2 years)

#### **EXPERIENCE**

#### GlobalLogic - Mercedes-Benz AG

Senior Software Engineer with DevOps

2024 - 2025

Developed and maintained internal products of Mercedes-Benz that are related to their own Data Lake (eXtollo) on Azure cloud. I was part of a team that was responsible with the Azure resources that are related to data storage & access management.

Worked on a custom built solution that was used together with Pulumi to orchestrate cloud processes and create resources that were used by internal MB clients.

Technologies used: Azure, Azure DevOps (pipelines), Azure Data Lakse Storage, Databricks, python, pulumi IaC, FastAPI, TDD, CI/CD pipelines, Docker

### BankInfoSecurity - Information Security Media Group (ISMG)

Senior Software Engineer with MLOps

2023 - 2024

Designed, configured, and maintained internal applications leveraging LangChain framework for Large Language Models (LLMs), facilitating efficient ingestion of large datasets by converting them into embedded documents. Integrated external AI models (OpenAI GPT) enabling stakeholders to effectively query the stored data. Fine-tuned local machine learning models using company-specific content to empower content creators in enhancing their workflow.

Developed and optimized data set processes for data modeling, mining, and production, ensuring the seamless flow of data throughout the organization. Demonstrated problem-solving expertise by efficiently troubleshooting complex data and analytics issues within the ETL (Extract, Transform, Load) pipeline.

Technologies used: AWS, Terraform, python [polars, pandas, h2o wave, meltano, dagster], LangChain, OpenAI, MySQL, CockroachDB, docker environments, linux architecture setup, bash scripting, setup of CI/CD pipelines, TDD, OpenAI APIs

## termsfeed.com - Legalcom Group

Senior Full-stack developer

2018 - 2023

Successfully developed and implemented Legalcom Group websites (termsfeed.com, privacypolicies.com, freeprivacypolicies.com) by creating custom-built backend and frontend solutions.

Leveraged expertise in Python 3.7 with Flask+SQLAlchemy to develop the backend, and utilized VueJS and Typescript to develop the frontend along with Angular for side projects. Effectively integrated payment portals (Braintree, Epoch, CCBill, PayPal) and worked with both SQL and NoSQL databases. Additionally, expertly utilized Firebase to enhance website performance and functionality.

Technologies used: python [flask], Vue.JS 2, Sass, vanilla Javascript, TypeScript, bash scripting, docker environments, MariaDB, Cypress.JS testing, creation & implementation of REST endpoints, CI/CD, TDD

## augnet.co.uk - Augnet UK

Senior Frontend developer

2018 - 2019

Created the frontend application for Augnet UK with VueJS (nuxt).

Brought my frontend development know-how to the table to develop a user-friendly experience. Implemented the latest tech to optimize the website's performance, security, and scalability, making it a great success.

Technologies used: Vue.JS 2, Sass, vanilla Javascript, implementation of REST endpoints, TDD

#### Freelancer

Senior Full-stack developer

OCTOBER 2013 - PRESENT

Contributed to the digital presence of several prestigious organizations, including the European Geothermal Energy Council, Atlantic Treaty Association (ATA), Young European Research Universities, Biopama, and European Network of Living Labs (ENOLL). Utilized custom WordPress themes to design and develop engaging and efficient websites. My role involved leveraging my expertise in web development to create user-centric interfaces, enhancing user experience significantly. Engaged in cutting-edge Web3 and DeFi projects, where I applied my technical skills to pioneer innovative solutions in blockchain technology, smart contract development, and decentralized financial systems, contributing to the evolution of digital finance and distributed ledger applications. Ensured the incorporation of cutting-edge technologies for improved website performance, robust security, and scalable architecture, driving the digital success of these platforms.

Technologies used: php [Laravel, WordPress, vanilla], CSS, JavaScript, TypeScript, WordPress custom plugins, WordPress custom themes, linux architecture setup, bash scripting, CI/CD, TDD, dedicated VPS control panel configuration in Plesk, Web3

# BMR Soft SRL, Cluj-Napoca

Middle backend developer

SEPTEMBER 2012 - FEBRUARY 2013

Played a key role in the development of innovative modules and user interfaces for Avanticart, a custom e-commerce platform by BMR Soft. Specialized in PHP and leveraged the unique capabilities of the Avanticart framework. My contributions included conducting thorough code reviews and offering constructive feedback, significantly elevating code quality and standards. Collaborated effectively with a dynamic team, adopting AGILE methodologies to streamline

workflow and accelerate project delivery. This experience honed my technical skills and reinforced my ability to work collaboratively in fast-paced, technology-driven environments.

Technologies used: php [custom built OOP framework called Avanticart], vanilla JavaScript, CSS, Adobe Photoshop, development of custom modules in php for Avanticart, development of custom themes for company clients

## Mediatic, Cluj-Napoca

## Junior back-end and frontend developer

JANUARY 2010 - JULY 2010

Initiated my career in software development by creating web applications and web scrapers. Gained practical experience in using PHP, HTML, and CSS, applying these technologies effectively to produce reliable results. Developed skills in Python for web scraping, demonstrating a growing proficiency and adaptability. This early stage of my career was marked by a keen willingness to learn and contribute, setting the foundation for my ongoing growth in the tech industry.

Technologies used: php [Codelgniter], python, jQuery, CSS, Adobe Photoshop

## SPOKEN LANGUAGES

English (C1), Romanian (C2), German (beginner - A1)