SLOBODAN OBRADOVIĆ

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SUMMARY

I am a Computer Science student with a solid foundation in software development principles and a deep interest in how complex systems operate and scale. I enjoy diving into new challenges, understanding how things work under the hood, and finding practical, efficient solutions to real problems. Whether I'm working on backend logic, infrastructure, or lower-level systems, I look for opportunities that push my thinking and help me grow both technically and conceptually.

EDUCATION

Bachelor of Computer Science, Faculty of Technical Sciences, University of Novi Sad, Serbia

2020 - Present

High School Diploma in Information Technology, Electrotechnical School "Mihajlo Pupin"

2016 - 2020

PROFESSIONAL EXPERIENCE

Software Engineering Intern at Smartocto

May 2023 - July 2023

- Developed a RESTful API using Node (with Express) and MongoDB as part of an internal web application.
- Gained practical experience with client-server architecture, networking protocols, version control, and best practices used in professional teams.

Private Tutor 2020 - 2024

- Provided one-on-one tutoring in topics including Programming, Operating Systems, and Algorithms.
- Developed personalized learning materials to help students grasp complex concepts.

PROJECTS

Mini Git (Portfolio)

Go, Smart HTTP, Zlib

• Rebuilt Git from the ground up in Go by implementing core commands—from the basics like git init to the complex git clone over Smart HTTP—uncovering how Git manages objects, compression, and delta-encoded packfiles.

Mini Docker (Portfolio)

Go, Docker, Linux, runc, containerD, chroot

• Rebuilt docker run from scratch in Go to deeply understand container internals—fetching images from Docker Hub, handling process and filesystem isolation, and executing containers using raw syscalls.

Video Converter (Portfolio)

Python, Docker, Kubernetes, Minikube, k9s, RabbitMQ, MongoDB, MySQL

• This project was my way of learning how real-world microservices run in Kubernetes — from containerized deployment to inter-service communication using queues, databases, and ingress routing.

LiarsLie (Portfolio)

Golang, Distributed Systems, BFT, Consensus

• Liars Lie is a game that simulates a distributed network of agents, where some lie by design, challenging the client to find the truth through majority voting and peer-to-peer reasoning—serving as a hands-on experiment in Byzantine fault tolerance and consensus mechanisms.

MicroSOA (Portfolio)

Golang, ASP.NET, gRPC, PostgreSQL, MongoDB, Redis, Docker, Angular with TS, nginx

• Initiated a hobby project to explore distributed systems by transforming a modular monolithic ASP.NET app into a distributed microservices architecture in Go, featuring gRPC-based internal communication, independent services, per-service databases, and full Docker-based orchestration.

NVAS-Pharmacy-shop (Portfolio)

Python, Django, DRF, PostgreSQL, RabbitMQ, Load Balancer, WebSocket, Docker, React with TS

• Built a system designed to scale under real-world pressure, with a proof-of-concept exploring DB replication, locking strategies, real-time communication (RabbitMQ + WebSockets), and Dockerized deployment behind an NGINX reverse proxy.

PSW Travel (Portfolio)

ASP.NET, Entity Framework, PostgreSQL, xUnit, Scrum, Angular with TS

• Worked in a 16-person SCRUM team to design and build a full-stack travel platform. The project was organized into four 3-week sprints, with clearly defined roles — gaining practical experience with agile workflows, and team-based delivery.

BSEP (Portfolio)

Python, Django, DRF, PostgreSQL, PKI, React with TS

• Engineered a security-focused platform with RBAC, multi-factor authentication, OAuth, CAPTCHA protection and rate limiting — applying secure-by-design principles to every layer of the system.