#### Milan Nikolic

## Belgrade, Serbia • milan.milancen12345@gmail.com

#### Education

# **Military Technical Academy**

Belgrade, Serbia

Bachelor's degree in information technologies

October 2025

Relevant Coursework: Data Structures and Algorithms, Object Oriented Programming, Web Development, Databases, Introduction to Cryptography, Networking.

Military High School

Belgrade, Serbia

**High School Diploma** 

September 2021

## **Projects**

## **DevFlow Full Stack Next.js Application**

- Implemented Next.js routing and authentication/authorization workflows
- Established backend features with Next.js, implemented real-time data using webhooks, and worked with MongoDB for data storage.
- Developed a community-based question and answer system with voting, tagging, and profile interaction features
- Designed reputation and badge systems to enhance user engagement.
- Integrated OpenAI for automated question answering.

## **Uber Ride Full Stack Application**

- Built the server-side using Express.js, implementing RESTful APIs to manage ride requests, user authentication, and real-time ride status.
- Designed and managed the PostgreSQL database, focusing on data efficiency for storing user profiles, ride histories, payment details, and real-time ride tracking.
- Optimized database queries, improving overall application performance by approximately 30% through indexed searches.
- Developed the user interface using React, enabling users to book rides, view ride details, and track drivers in real time.

## GSM encryption (A5/1, A5/2, Kasumi algorithms)

- Researched GSM (Global System for Mobile Communications) encryption algorithms, focusing on A5/1, A5/2, and Kasumi.
- Investigated the role of security through obscurity in early GSM encryption and its divergence from Shannon's principle of cryptography.
- Evaluated the impact of these algorithms on global mobile security, covering 6+ billion users worldwide at its peak.

#### **Skills & Interests**

Programming: C++, C, Java, JavaScript, SQL, Python, Computer Networking.

Design: Figma, Adobe XD.

**Languages:** Fluent English, Conversational Russian, Native Serbian.

#### Leadership

## Web Hosting and Infrastructure Optimization Lead

Small Webflow Agency

- Managed efforts to reduce hosting and domain costs by 70%.
- Projected and maintained web server and hosting infrastructure, ensuring high performance and reliability for client websites.