

Filip Mrđanović

SOFTWARE ENGINEER

Novi Sad - Serbia | filipmrdjanovic.work@gmail.com

Linkedin - [linkedin.com/in/filip-mrdjanovic](https://www.linkedin.com/in/filip-mrdjanovic)

Github - github.com/filip-mrdjanovic

Portfolio - filipmrdjanovic.dev



Experience

brigit.dev | Software Engineer

2024 – Present

- Developed cross-platform solutions across edtech, medtech, and location-based services, using React, React Native, Next.js, NestJS and Hono
- Integrated real-time features and geolocation tracking via Google Maps APIs in mobile apps
- Collaborated closely with designers, backend engineers, and product teams in agile sprints to deliver impactful user-facing features
- Contributed to improved product quality, user retention, and operational efficiency

Infinitydev | Frontend Developer

2022 – 2023

- Built gamified web and mobile applications using React and React Native, aimed at enhancing user participation in event-based platforms
- Implemented logic to personalize user journeys based on voting behaviors, improving both engagement and shared experiences within groups
- Focused on clean UI/UX and modular architecture for scalability and maintainability

Holistic Digital Solutions | Student Intern

2021 – 2022

- Delivered full-stack features across e-commerce and law-tech platforms using React, Angular, and Spring Boot
- Contributed to functionality such as task tracking, legal workflows, and streamlined client communication
- Gained experience in integrating REST APIs and handling form-driven, data-heavy applications

Marble IT | Student Intern

2019

- Participated in the development of a Unity-based game
- Focused on gameplay mechanics, UI flow, and game logic within the Unity engine using C# applications

RT-RK | Student Intern

2019

- Built a Python application for real-time visualization and analysis of simulated car engine data
- Focused on data streaming, diagnostic metrics, and interface clarity for technical users

Education

Faculty of Technical Sciences | Information Engineering 2019

Skills & abilities

Languages

- JavaScript
- TypeScript
- Python
- C#
- Java
- SQL

Frontend Frameworks

- React
- React Native
- Angular

Backend Frameworks

- Node.js
- NestJS
- Spring Boot

Databases

- PostgreSQL
- MongoDB

Architecture & APIs

- REST API Development
- gRPC and tRPC
- Microservices Architecture
- Modular and Scalable Architecture
- Real-time Data Integration

Other Technical Skills

- Cross-platform Development (Web, Mobile, Desktop, Game)
- Geolocation and Maps (Google Maps API)
- UI/UX Design Principles
- Agile Development (Scrum, Sprint Collaboration)
- Game Development (Unity, Gameplay Logic)
- Data Streaming and Visualization
- Machine Learning & Data Analysis
- Git / Version Control

Projects

Greenland Komarov | React Native, Expo, TypeScript, Supabase

- Built an Android-first field operations app for managing worker tasks and schedules.
- Enabled role-based workflows (manager vs worker) for creating, assigning, and progressing tasks through the day.
- Included a focused calendar/scheduling experience for planning work and tracking task assignments by date.
- Added powerful task search + multi-criteria filtering (status, type, urgency, project) to quickly find the right work items.
- Implemented secure sign-in and onboarding for workers using Supabase authentication with a required initial password setup.

Spotbuddy | React Native, Expo, TypeScript

- Developed a cross-platform venue discovery app with advanced filtering.
- Built modular architecture using Expo Router, React Navigation, and Context API for global state.
- Implemented secure authentication, guest mode, and onboarding experience.
- Designed responsive dark/light themes with smooth animations using NativeWind and Reanimated.
- Utilized React Query for efficient server state management and caching.

Blood Donation Center | React, TypeScript, Spring Boot, PostgreSQL

- Built a full-stack platform for managing appointments and donor data
- Designed clean workflows for administrators and improved user scheduling experience

Appointment Manager | React, TypeScript, MongoDB, gRPC, Spring Boot

- Developed a microservice-based system for real-time appointment handling
- Focused on backend messaging performance and frontend responsiveness

Trading Manager | React, TypeScript, Spring Boot, PostgreSQL

- Created a dashboard for analyzing stock market data
- Built custom charts and real-time data updates for portfolio tracking

Pattern Recognition (Image Classification) | Python, Pandas, scikit-learn

- Built models (SVM, Random Forest, Naive Bayes) to classify vectorized images
- Applied normalization and feature scaling, evaluated using accuracy, precision, recall, F1-score

Emotion Detection with CNNs | Python, Keras, OpenCV

- Developed an image-based facial emotion classifier using custom data and CNNs
- Trained model on 7 emotional classes with real-time image input and augmentation

Air Quality (PM2.5) Prediction | Python, scikit-learn, statsmodels

- Used data from Guangzhou to predict PM2.5 pollution levels
- Applied regression models (Linear, Ridge, Lasso) and KNN classification
- Engineered features, handled categorical encoding, and validated with multiple evaluation metrics

Camera Toggle Utility | C#

- Created a lightweight desktop app for enabling/disabling the webcam from the system tray
- Emphasized privacy, accessibility, and fast device toggling

City Generator | Unity, C#

- Procedurally generated urban layouts using Perlin noise for terrain and building distribution
- Built for exploratory design and testing dynamic environments

Dragon Arena | Unity, C#

- Developed a 2D space shooter with wave-based combat and upgradeable weapons
- Integrated ad logic and dynamic difficulty system