MIKITA VOLAKH



Location Amsterdam, Netherlands

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Skills and Experiences

Technologies Node.js | Express.js | Vue.js | MongoDB | MySQL | Electron | WebSockets | JWT |

Git | AWS (EC2, S3, Lambda) | Docker | GitHub Actions | Trello | Cypress | nginx

Prog. Languages Javascript | Typescript | C/C++ | Python | Java | Scala | x86 Assembly | SQL

Field Knowledge Object-Oriented & Functional Programming | Data Structures & Algorithms |

Containerization | RESTful | APIs | QA | Unit Testing | Time-Series Forecasting | DevOps | CI/CD | Processes & Multicore Programming | Compiler Optimization | System Architecture & Networking | (No)SQL | Web Security | UNIX | Cloud

Soft Skills Agile | Scrum | Teamwork | Project Management | Presentations | Adaptability |

Flexibility | Ethics | Decision-making | Perseverance | Openness to Criticism

Languages English (C2) | Dutch (A2+) | Belarusian (native) | Russian (native)

Education

09/2020 — 12/2023 BSc Computer Science — Vrije Universiteit Amsterdam

Deep Programming Minor — GPA: 8.0

Projects

Real-time Monitoring and Predictive Modeling for Space Occupancy

- Implemented a *REST API* using Node.js and Express.js for historical data retrieval and transfer
- Integrated data from MQTT streams with the WebSocket server to enable real-time communication
- Optimized MongoDB database performance to efficiently handle high volumes of data, processing approximately 15 incoming packets per second
- Processed historical data collected over one year to create an abundant dataset for future use
- Developed and optimized multiple *ML time-series forecasting models* to predict occupancy patterns
- Designed a user-friendly *UI* to enhance accessibility and usability in terms of occupancy visualization

Realt

- Developed a *REST API* to provide communication & data interaction between the server and the clients
- Implemented *session-based authentication* to ensure secure access and personalized user experiences based on the user's role and corresponding set of permissions
- Incorporated *custom search*, *sorting*, *and filtering functionalities* to enhance user navigation
- Automated the CI/CD process using GitHub Actions to streamline development workflows and deployment

GPXManager

- Implemented the *logic* behind the application, allowing users to visualize GPX files and gain insights on various metrics such as covered distance, time spent, elevation gained, and calories burned
- Developed a *test suite* using JUnit to ensure the reliability and functionality of the application