Andro Mikulic

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Summary

Senior full-stack software engineer and game developer. Highly skilled in optimization, memory management, algorithm design & implementation. Adaptable to any tech stack & environment.

Main Skills

Node.js, TypeScript, NestJS, Next.js, C#, Unity, PostgreSQL, React, Websockets, SQL, .NET

Latest Experience

Rock My World Media
Lead Back-end Developer | 10/2021 - Present

- Improved user experience by decreasing loading times by 2x and reduced infrastructure costs by reorganizing and redesigning the database model.
- Enhanced security and user safety, as well as prevented attempted intrusions, by applying the latest best practices missing in the legacy back-end systems.
- Implemented automatic payment, CRM and Slack hooks that reduced workload for the entire team, automating workflows and increasing sales acquisition.

Gryd Media
Contract Unity Consultant / Lead | 04/2024 - 07/2024

- Developed a WebGL MVP for apartment touring using 360 pictures with Unity and C#.
- Implemented a minimap system that maps 1:1 with the actual space and keeps check of the point of view.
- Optimized the bundle size and compressed images, making the build around 20% smaller than source pictures while still preserving quality.
- Allowed for fully customizable starting positions and shareable links that hold the complete state of the 360 virtual tour via URL query parameters.
- Implemented a simple and easy-to-use system for tour management, allowing for quick (O(1)) reference to all data, reducing loading times, and improving user experience.

Lightbox Studio
Contract Senior Unity Engineer | 05/2023 - 10/2023

- Improved performance, reduced loading time, and added version control and automatic deployment systems. Fixed several issues with the existing project.
- Developed a web AR app that automatically applies textures to furniture models and places that model into the AR scene with complete controls like scale and rotate.
- Implemented automatic QR code generation and embedded various material and model data to streamline the user experience from the furniture configurator to the web AR app.

Kickstage
Contract Senior Back-end Node.js Engineer | 03/2023 - 07/2023

- Developed API endpoints and features that track and calculate energy consumption and CO2 emissions for each machine, machine category, and location for the Mymuenet portal (www.mueller-frick.com/technologies/digital-solutions/mymuenet/).
- Boosted code output and reduced debugging time by improving the project's code consistency. Implemented project-wide formatting and linting standards, including pre-commit hooks for automating the entire pre-commit process.
- Participated and contributed to business logic and features discussion and decisions in meetings.
- Increased feature development speed by creating quick mock API endpoints so front-end developers could build their side in tandem with the back-end team.

Jadu
Contract Senior Unity Consultant | 03/2022 - 08/2022

- Enhanced development speed by developing the core audio system to facilitate easier audio handling for other developers.

- Increased user retention, decreased dropoffs, and reduced app storage size by implementing smart caching systems for audio data.
- Improved user experience and increased engagement by fixing core issues and bugs.

TuringSense
Contract Senior Unity Engineer and Consultant | 11/2021 - 04/2022

- Improved realism and user experience significantly by developing a new and improved algorithm that reduced avatar glitching and pass-through, also known as avatar inner body penetration.
- Enhanced and implemented new UI elements for all versions of the mobile app.
- Implemented stat tracking using local and API data, which gamified the app flow and made the users more involved in the product, increasing retention and engagement.

Kickstage
ContractSenior Node.js Developer | 01/2019 - 03/2020

- Developed the authentication microservice for the Wintrado forex platform using Node.js, taking that load off other services and allowing for faster development.
- Contributed to the messaging implementation of RabbitMQ for the microservices used by the Wintrado forex platform, which increased the stability and uptime of the entire system.
- Tracked and fixed bugs in multiple microservices with the help of Sentry, making the user experience cleaner and more consistent.

Other Projects

VoxBox - https://voxbox.store/

- A MagicaVoxel asset sharing platform that allows users to register for free, upload models, download, share and rate other people's creations
- TypeScript, Nest.JS, Next.js, PostgreSQL, React, MantineUI

Education

Faculty of Electrical Engineering and Computing | Zagreb
Information Technology | 10/2021
Master's degree

Faculty of Electrical Engineering and Computing | Zagreb
Software Engineering | 10/2019
Bachelor's degree

Certificates

C1 English - Cambridge University

Links

LinkedIn: https://www.linkedin.com/in/andromikulic/

Personal website: https://rumpledcode.com/

GitHub: https://github.com/AndroMikulic