Mustafa Mesrefoglu

LinkedIn | *Portfolio* | mamesrefoglu@gmail.com | +1 (226) 978-2747 | Waterloo, ON | N2L 5S1

Profile Summary

Versatile full-stack developer, equally energized by the deep problem-solving of backend systems and the creative precision of frontend design. Led development of SaaS web applications and AR/XR products in Java, Kotlin, React, and Unity, delivering clean architectures under the hood and pixel-perfect, intuitive experiences on the surface. Consistently boosted performance and usability for high-impact projects, and thrives on turning complex challenges into elegant, efficient solutions.

Technical Skills

Languages: Java, Python, HTML, CSS, JavaScript, TypeScript, SQL, Kotlin, C#, .NET, C++
Tools: React, Node.js, Next.js, Django, REST APIs, Jenkins, MangoDB, CockroachDB, Angular, Linux, Git

Experience

Unity AR & XR Developer Sept 2024 – Dec 2024
Mawari *Waterloo, ON*

- Led development of cross-platform AR/XR apps using Unity and C#, delivering demos on Quest 3 and Vision Pro
- Implemented GPU compute shaders to boost FPS by 2.5×, vastly improving real-time performance
- Designed adaptive spatial UIs, applying frontend patterns for intuitive headset interactions
- Architected a feature-flag system for toggling XR capabilities, streamlining deployments across devices
- Automated end-to-end testing with Bash scripts, cutting QA time by 80% and accelerating releases

Backend Engineer Jan 2023 – Dec 2023
Faire *Waterloo, ON*

- Managed backend design for a $0.7M annual impact project, defining services and data flows
- Ran weekly update meetings with stakeholders and developers, keeping the project on schedule
- Built core Java/Kotlin services: email compilers, backfills, event processors, jobs, and tasks
- Created 20+ REST API end points for frontend integration, utilizing CI/CD pipelines
- Reviewed over 50 pull requests, giving clear feedback and raising code quality

Projects

Lipu Pona | Python, Django, JavaScript, React, Node.js, Chakra UI, HTML, REST APIs, PostgreSQL, Database
A full-stack social media platform for the "toki pona" enthusiasts

- Implemented both back end and front end from scratch, ensuring security and putting flawless user experience first
- Deployed using Cloudflare (frontend), Fly.io (backend), and SendGrid (email service) and connected them together
- Still getting feedback from active users to solve problems and add new features

AI Motorcycle Recommender | TypeScript, React, Vite, Node.js, Tailwindcss, HTML, OpenAI API
A website that helps you choose your new motorcycle with the help of AI

- Used responsive React components with Tailwind CSS, ensuring smooth mobile and desktop interactions

Weather Forecast App | JavaScript, React, Node.js, Tailwindcss, HTML, OpenWeatherMap, JSON
An open-source aesthetic forecast web application

- Optimized React state management to cut initial load times and improve UI responsiveness

Spinometry | Unity3D, C#, Android, Google Play API
*An idle video game, currently published on Google Play with **10,000+ downloads***

- Collected and analyzed player feedback through social media and in-game surveys, driving 10,000+ downloads

Education

Bachelor of Mathematics (Honors in Combinatorics & Optimization, Minor in Computer Science) Sep 2020 – Apr 2025
University of Waterloo *Waterloo, ON*