Alex D'agostino Aleksandrov - IoT Developer

About Me

I've been captivated by the world of IoT for years - fascinated by the silent conversations happening behind the scenes between devices, microservices, and infrastructure. I love building the invisible layers that bring everyday products to life.

Professional Experience

Phasefour, Eindhoven, NL

February 2024 - March 2024 Mobile Application Developer - Salvo Geotracking Solutions

- Developed a battery-efficient user tracking app using client-side geofencing (Swift, SwiftUI, SQLite, iOS).
- Achieved less than 10% daily battery consumption while maintaining reliable background operation.
- Quickly prototyped and optimized under a tight 1-month deadline.
- (Note: This is my primary mobile dev experience, but I'm open to revisiting this area.)

Phasefour, Eindhoven, NL

March 2024 - April 2024 Full Stack Developer - Salvo MAPS

- Created a geofence drawing tool and project organization platform using C#, ASP.NET, Azure, React.
- Enabled near-instant geofence suggestions based on historical data and user location.
- Automated geofence loading and project creation workflows for users.

Phasefour, Eindhoven, NL

April 2024 Full Stack Developer - Frijado Proof of Concept

- Designed and built a POC that led to client acquisition, incorporating:
    - React UI and Express backend simulating IoT devices
    - ASP.NET backend with Azure services (IoTHub, Cosmos DB, Blob Storage)

Phasefour, Eindhoven, NL

May 2024 - January 2025 Full Stack Developer - Frijado Dashboard

- Delivered a full-featured IoT dashboard using C#, ASP.NET, React18, Azure, Microsoft EntraID, MSSQL.
- Features included device onboarding, monitoring, custom rule engine, application insights, and secure auth via Entra ID.

CGM Consulting, Turin (Sense Reply / Gridspertise)

February 2025 - Present Backend Developer

- Working on distributed system architecture with cutting-edge technologies including Wasm and Dapr.
- Key contributions:
    - Designed an Observation API integrating InfluxDB and MongoDB
    - Removed significant technical debt by rewriting REST APIs
    - Reduced CPU usage by 10x and RAM by 15x across multiple microservices
    - Added comprehensive documentation and OpenAPI/AsyncAPI specifications

Open Source Contributions I actively improve tools I use daily, including:

- vscode-neovim/vscode-neovim: Vim mode for VSCode powered by Neovim
- Dapr: Distributed Application Runtime
- adrenaissance/ascanius: Configuration loading library
- adrenaissance/NeovimConfig: My personal Neovim configuration

Education

Liceo Classico Antonio Canova, Treviso 2016 - 2021

Technical University of Eindhoven (TU/e) 2021 - 2023 Bachelor of Computer Science

Languages

- **Italian (Native)**
- **Serbian (Native)**
- **English (Academic fluency)**
- **Spanish (Conversational)**