Keir MacDonald

SOFTWARE ENGINEER

Profile

Senior web developer and team lead with over a decade of development experience. I specialise in backend tech, working on ASP.NET Core microservices for the last 3 years. I focus on delivering high quality scalable solutions, and helping teams do the same.

Employment History

Development Team Lead, Fitness Software Company

OCTOBER 2020 — PRESENT

- Implementation expert working on critical areas of backend code for ASP.NET Core microservices SaaS platform, optimising performance hotspots, building library functions for the team to use, and other skilled tasks
- Advising other teams on feature/API design and implementation
- Teaching and driving adoption of development best practices
- Mentoring, managing, and recruiting other developers

Senior Developer, Fitness Software Company

NOVEMBER 2018 — OCTOBER 2020

- Developed backend for greenfield SaaS products in ASP.NET Core running on Azure/Kubernetes microservices architecture
- Took a lead developer role within an agile scrum team, guiding and mentoring other developers
- Led design and implementation of some crucial parts such as inter-service message queues (RabbitMQ) and reporting stack (Snowflake/dbt)
- Maintained the full stack of a current SaaS product in ASP.NET MVC and TypeScript, Bootstrap, KnockoutJS
- Set up CI pipelines and processes in Azure DevOps to automate deployment
- Managed Azure infrastructure and reduced cloud costs of one product by 30%

Software Team Lead, Simulation System Manufacturer

AUGUST 2016 — NOVEMBER 2018

- Led development team working on C# scientific desktop application
- Organised workloads and managed team, tools, and processes

Software Engineer, Simulation System Manufacturer

SEPTEMBER 2009 — AUGUST 2016

- Maintained and developed mature C# scientific desktop application interfacing with earthquake simulation hardware
- Developed real-time embedded Digital Signal Processing code in C
- Modernised development processes with bug and feature tracking, continuous integration, migrating from Subversion to Git
- Provided third-line support directly to customers

Education

BSc Computer Science (1st Class), Royal Holloway, University of London

2006 — 2009

Studied various subjects: algorithms, data networking, databases, signal processing, 3D graphics, operating system theory, and more. Won a scholarship prize.

Details

Didcot, Oxfordshire

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Links

LinkedIn

Skills

C# .NET

ASP.NET 5.0

Entity Framework

RESTful APIs

SQL Databases

Microservices

Microsoft Azure

Azure DevOps

Git

Side Projects

ASP.NET Core + React SPA

2018 — 2019

https://elite.kamd.me.uk/

An early adventure into single-page web apps for me, learning front-end technology. Helper app for a space sim game, finding points of interest among millions of stars.

ASP.NET Core + PostgreSQL backend. Front end originally written in a beta version of Blazor C# WASM but later rewritten in React, TypeScript, and Bootstrap.

I enjoyed React's unidirectional data flow ideas and would be interested in using it professionally in future.

References

References available upon request