Sam Maughan

Junior Software Developer

Eastbourne (open to relocation) | samuelmaughan@outlook.com | 07476 659 332

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Personal Statement

I have always enjoyed abstract thinking and problem solving, which is what first prompted me to learn computer programming and computer science. During my university degree, I chose to incorporate code into my coursework wherever possible: from exploring algorithmic music using SuperCollider, to empirical research using Python and R. I received great personal satisfaction from these projects, which has prompted me to develop my professional skillset as a software engineer.

Technical Skills

Overview: C# / .NET, Python, JavaScript, TypeScript, Input / Output streams, Async C#, LINQ, Unit Testing (NUnit), Mocking (NSubstitute, Moq), Microsoft Visual Studio, PowerShell, Bash, Git

Databases: Relational Databases (Microsoft SQL Server, Transact SQL, SQLite), Basic ADO.NET, Object-relational mapping / ORM (Entity Framework Core), Data Normalisation and Schema Design

Back End: ASP.NET, SignalR, Model-View-Controller (MVC), JWT and Cookie Authentication, Password Hashing and Salting, Middleware in ASP.NET Core, Containerisation using Docker

Front End: React, Blazor, Astro, HTML, CSS, Tailwind CSS, DOM

Cloud: AWS, Netlify

General: Object Oriented Programming, Design Patterns, Functional Programming, Test Driven Development, Pair Programming, System Architecture

Recent Projects

TV Show Review and Social Network Site (Team Project) | .NET | GitHub
- Worked with ASP.NET Core and Blazor to create a responsive web application.
- Implemented authentication using Identity and a live-chat room feature using SignalR.

ECommerce API | .NET | GitHub
- Implemented password hashing and salting using Pbkdf2.
- Developed configurable JWT authentication with cookie and refresh-token support.

RESTful Record Shop API | .NET | GitHub
- Worked with ASP.NET Core, SQL Server, and Entity Framework Core.
- Followed test-driven development, using NUnit for unit testing.

AI Recipe Generator | JavaScript | Live Demo | GitHub
- Worked with Vite, React, and the Huggingface Inference API.
- Deployed the project to Netlify and setup Serverless Functions.

Professional Development

Northcoders Software Development in C# Bootcamp
November 2024 – February 2025
- An intensive program teaching the skills needed for software development within the C# .Net ecosystem. It is heavily built around pair programming and industry best practice.

The Odin Project: Foundation Course
September 2024 – October 2024
- An open, self-taught curriculum teaching the fundamentals of web development using HTML, CSS, and JavaScript.

Python Programming MOOC 2024
July 2024 – October 2024
- An open, self-taught curriculum developed by the University of Helsinki, covering multi-paradigm programming using the Python language.

Education

BA Music | First-Class Honours | Durham University
Algorithmic Composition and Empirical Studies
September 2021 – June 2024
Prizes and Distinctions:
- *The Rosalind Dickinson Prize*, awarded to "an outstanding candidate"
- *The Eve Myra Kisch Prize, awarded for "proficiency in Music"*

A-levels: Maths (A) Physics (A*) Music (A*)
September 2018 – June 2020

Experience

Librarian, Durham University Palatinate Orchestra(s)
June 2023 – June 2024
- Managed the organization and acquisition of sheet music for two classical orchestras totalling over one hundred musicians.
- Worked as a part of a team to organize concerts, rehearsals, and logistics.

Musical Director, Josephine Butler College Folk Band
June 2022 – June 2023
- Directed and arranged music to be performed by a small band,
- Liaised with event managers to organize required equipment and technology.

Hobbies and Interests

Outside of programming, I enjoy playing the clarinet and piano in orchestras, and composing music of my own. I also enjoy physical exercise and have a great interest in spending tine outdoors.