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About Me

I am a Backend Engineer with 7+ years of commercial experience in C#, .Net, JavaScript, experience in Python and CPP. I am moving cities to London and would like to find a long-term career role. I have worked for large scale enterprise CI/CD projects for clients such as Greene King, APM, Bet365 and Electrolux involving designing contract-first APIs, creating pipelines, highly performant and secure applications. I have also worked in TDD/BDD projects. I have experience in Agile methodologies and have certifications on software methodologies. I have been involved with the Node.js initiative as a mentee to further Node.js, I plan to become a mentor this year. I have a proficient grasp and commercial experience with Azure and AWS cloud technologies and achieving cloud certifications whilst doing so.

Technologies delivered with:

C#
Python
Javascript ReactJs
Node.js - TypeScript - NextJs
NestJs
.Net Framework/Core
Entity Framework Core
Azure Suite - Functions, Cosmos DB, Entra ID
AWS Suite - Lambda, EC2, ECS, API Gateway
Unit testing/ Integration testing
Umbraco
Git
Relational & Non-Relational DBs
Razor & Blazor
CSS3
HTML5
Notion/Miro/Whiteboard
Github/Gitlab/Dev Ops

EXPERIENCE

March 2023 – Current

Software Engineer (C#, Typescript, SQL) • BJSS Ltd • Bristol, UK

Course:

- AWS Cloud Developer
- Go Lang Basics

What projects I worked on:

- Global Gambling Company - Software Engineer (Feb-2024 to present)
 - Delivered a full proof of concept (discovery) and final product ahead of schedule in 8 months, projected 9 months.
 - Involved **SQL** for data access by writing and testing **highly complex stored procedures**, adding database tables and creating views.
 - **Liased with clients** to extract business logic whilst refining with wider team.
 - **TDD/BDD approach to software development**. Added 100% code coverage via NUnit/Mock.
 - **API design for microservice architecture**.
 - Document business logic in clear and accurate sequence diagrams.
- National Resource Website - Tech Lead (Aug-2024 to Aug-2024)
 - Lead a discovery project as a **Technical Lead**.
 - Delivered a health check report detailing the mandatory, urgent and potential improvement work for the project along with timelines.
 - Advised project engineering manager on how to best upgrade from Umbraco 8 (.NET Framework) to Umbraco 13 (.NET Core). Provided detailed action plan.
- Major Government Health Organisation - Software Engineer (Sep-2023 to Feb-2024)
 - Greenfield project which successfully delivered a fully testable and release ready.
 - **Delivered open source serverless architecture** using AWS API Gateway, Lambdas (typescript runtime).
 - **Designed deployment build and CI/CD pipelines** using Github Actions.
 - API developed against Government Digital Service (GDS) spec and added to API catalogue.
 - Mentoring junior developers.
 - Entra ID user pool to set permissions to endpoint, **implemented JWT tokens for authentication and authorization**.
 - Modify Lambda compile time to inject environment variables from AWS Secrets Manager.
- Disruptor Utilities Company - Software Engineer (Apr-2023 to Aug-2023)
 - I was involved on a greenfield project to extend their services in providing multi utility services to businesses.
 - .Net Core project using **LINQ and Entity Framework Core**.
 - TDD/BDD approach with contract-driven development for APIs
 - **Delivered Blazor front-end**
 - Operated and worked within Agile SCRUM team
- BJSS – Green Engineer Project - Software Engineer (Mar-2023 to Jul-2023)
 - This internal project on sustainability how do we visualise carbon emissions generated by our code?
 - Delivered company-wide talk on how to visualise carbon emissions in code.
 - Developed a prototype package to track the carbon emissions of Python runtime lambdas, export monthly reports and use tools that would visualise emissions.

Oct 2022 – March 2023

Software Engineer (C#, Python, CPP) • Vertical Aerospace • Bristol, UK

Course:

- What is Modern Software Engineering? by Dave Farley
- AWS Solutions Architect

What I worked on:

- UML, Sequence and Block diagrams in order to design high quality clean code projects in Python and C#.
- Python test suite for packet integrity checks. Involves generating test data using config, generating shell scripts to call packages, parsing packets to a Pytest application to verify average transmission rate per datagram and payload integrity against a pre generated datagram.
- Modifying on board data system and create a data network streaming CPP application.
- Designing network capture C# parsers for to be decoded further downstream, this project was made using a TDD.
- Discussing and developing aircraft configurations.
- Creating an API for Vertiports booking system in .NET Project using Blazor.
- Operating with a high level of autonomy including picking up simple stubs and breaking them down into manageable tasks.
- Extending unit test suites as part of definition of done.
- Learning the basics of Docker containerisation, but still in the process of implementing it into a build pipeline (requires a bit more learning)

Jun 2021 – Oct 2022

Backend Engineer/ .Net Developer • Felinesoft • Bristol, UK

Courses:

- Data Structures Algorithms Coding with Mosh
- C# Mastery Coding With Mosh
- AWS Cloud Certified Practitioner Udemy

What I worked on:

- Working in a sprint team with more responsibility and autonomy, whilst working closely with the client and their CRM and UAT teams.
- Writing clean and concise object oriented code C# using SOLID and DRY principles.
- Developed large scale assessment tools with comparison matrix, Association for Project Manager (APM) Continuous Professional Development tool, extended members platform for APM, interactive bookshop and booking system for events as well as many other website functionalities.
- Maintained and extended the websites whilst using reverse proxies and rewrite rules to simultaneously run two instances of Umbraco (different versions) and website as part of a migration project to clean legacy code and migrate user information from CRMs, CMS and SQL storage.
- Built video, image and news/blogs sitemaps requiring a recursive function to crawl over both instances of the website and write out the XML.
- Delivered projects with Azure products such as table storage, blob storage, CosmosDb, SQL storage, ADb2c, AppInsights. Also setting up and managing resources within Azure. Primary focus was learning AzureVirtualMachines (Azure Iaas).
- Extended the unit test suite by 25% using NUnit.
- Implementing Redis Cache for storing database queries.
- Working with a PRO8 CRM API to fetch data which was then mapped to CMS and used on the website.
- Writing SQL queries including Common Table Expressions in SQL Server 2014
- Managing releases using the GitFlow principle (also used version control software to help with this).
- Mentoring junior developers.
- Extending Umbraco programmatically (C#) and creating custom controllers using AngularJS.

Side Projects:

- Created a restaurant booking app with cart and menu. Was used to practice database creation, querying and also entity framework. Written in C#, HTML and CSS.

Nov 2019 - Jun 2021

Web Developer/Full Stack/Programmer • Zone Digital • Bristol, UK

Certifications:

- 98-375: MTA: Application Development Fundamentals
- BCS Level 4 Diploma in Software Development Methodologies

What I worked on:

- Created a Configuration Viewer Tool in EpiServer for Electrolux to allow editors to see configurations for all brands and markets, using C# ASP.Net.
- Maintaining Microservices, such as Events Portal and Book a Table at enterprise level for Greene King using React JavaScript library.
- Improving core web vitals through implementing lazy loading site wide.
- Working in a CI pipeline and learning how to deliver using the CD pipeline
- Removing legacy code and previous services from solution and CMS to clear Umbraco Error Logs.
- Extending websites using the Episerver and Umbraco CMS platforms.
- Participating in an Agile multidisciplinary team to contribute to stand ups, refinements, retrospectives, planning, example mapping (Gherkin and BDD) and demos to clients.
- Developing and extending front-end website functionality using JavaScript, HTML5, React and CSS3
- Using Confluence to update documentation and use JIRA to manage workflow efficiently.
- Experience using DataDog log management and APM.

Side Projects:

- Created an online CRUD application for team members to create and track training requests. Achieved using ASP.Net MVC (C#), Identity Framework and Razor. I also created a relational database and entity relationship diagrams.

Jan 2017 – Nov 2019

WordPress Web Development • Self Employed • Bristol, UK

What I worked on:

- Designing and building WordPress websites using Elementor.
 - Giving local small scale businesses an online presence.
 - Build simple CSS and HTML blocks.
 - Teach clients how to maintain and improve their own websites using a CMS.
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University of Bristol – Aerospace Engineering (HND) – Bristol, UK

Transferable skills:

- Design and Computing - (C Programming Basics and CAD design work)
- Engineering Mathematics 1 & 2 - (Statistical Modeling and Algebraic Concepts)