

Back-end developer specialising in C#/.NET and SQL Server, experienced in building high-performance applications and delivering measurable improvements across platforms. Strong problem-solving, analytical background and eagerness to learn and progress from a Mathematics degree.

## Back End Developer

CoreStream GRC

Nov 2024 – Present

London, UK

- Enhanced platform first-load speed by over 90% for Analysts using C#, .NET and Vue.js, improving site performance through shorter queries, concurrent caching and smaller response sizes.
- Refactored hierarchy functionality into a single table structure using EF Core Migrations, reducing average response time by 40%, applying synchronisation primitives (ReaderWriterLockSlim) to eliminate race condition scenarios.
- Reduced stored email log size by over 85%, extracting essential information, improving storage efficiency across all database servers, reducing time taken in email troubleshooting.
- Implemented concurrent, background workflow services using asynchronous patterns with async/await and ConcurrentDictionary, alongside event-driven notification systems for UI updates.

## Configuration Analyst

CoreStream GRC

Nov 2023 — Nov 2024

London, UK

- Developed an internal Chrome extension, automating frequent tasks by up to 80%.
- Independently managed and maintained multiple API Integrations across the platform, enabling complex, client-specific workflows.
- Recognised for exceptional performance, selected as 1 of only 4 employees company-wide during multiple biannual awards.

## Support Engineer

Content Guru

Sept 2022 — Mar 2023

Bracknell, UK

- Streamlined issue resolution, by identifying frequently recurring issues and crafting efficient and customizable SQL queries, extracting and combining data from multiple databases.
- Independently developed a CLI script in Python, automating conversion of RSA tokens into QR codes and file encryption, resulting in a 90%+ reduction in processing time.

## Education and Certifications

- **(MMath) Master of Mathematics with a study year abroad**, University of Bath, UK. 2018–2022
- **(MMath) Master of Mathematics with a study year abroad**, University of Helsinki, Finland. 2020–2021

## Technologies and Languages

- Languages: C#, TypeScript, Python
- Technologies: .NET (ASP.NET Core), SQL Server, Entity Framework Core, Azure DevOps, Git, xUnit, Powershell

## Projects

- **Bookmarkt** - Built a full stack Goodreads clone with Typescript and React, leveraging the Google Books API as a search engine.
- **Findify** - Using the Spotify Web API, developed an app to display users' top tracks, artists and genres which also generated customisable track recommendations automatically creating a Spotify playlist in the user's account.