# **Benjamin Hogg**

♥ United Kingdom
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# **SUMMARY**

Dedicated software engineer with a background in education, including six years of teaching in Taiwan, where I developed communication, leadership, and problem-solving skills. Earned an MSc in Software Engineering (First Class) by completing projects that demonstrate proficiency in software design, development, and modern web technologies such as React, ASP.NET, and SQL-based databases. Seeking an entry-level position in software development to apply my skill set in a collaborative environment and continue my professional growth.

# **SKILLS**

Full-Stack Web Development: Proficient in building responsive, user-friendly interfaces and designing RESTful APIs and microservices using HTML, CSS, React, C#, JavaScript, ASP.NET, Azure, Python, Flask, and Google Cloud Platform.

State Management: Skilled in managing application state with Redux Toolkit, Zustand, and Tanstack Query for efficient data handling and UI performance.

API Integration: Experienced in integrating third-party APIs (e.g., Google Calendar, Google Books) for secure data exchange and enhanced functionality.

Database Management: Adept at designing and optimizing relational and NoSQL databases, including SQLite, PostgreSQL, Microsoft SQL Server, and Firebase Firestore, with experience using LINQ for efficient querying and data manipulation.

Testing and Debugging: Skilled in unit, integration, and end-to-end testing using Jest, xUnit, Cypress, Postman, and Chrome DevTools.

Containerization & Orchestration: Competent with Docker and Kubernetes for containerized application management.

Performance Optimization: Experience in lazy loading, caching, code splitting, and other optimization techniques to improve web application performance.

Security: Adept at securing web applications using OAuth 2.0 and JWT for secure authentication and authorization.

Mobile Development: Experienced in developing iOS applications using Swift and XCode.

Version Control: Experienced with Git for version control and collaboration in development teams.

Software Architecture & Design: Strong knowledge of OOP, SOLID principles, and design patterns, with experience in scalable software architecture.

Communication and Collaboration: Developed strong communication skills through teaching, facilitating effective collaboration in diverse teams, and explaining complex concepts clearly.

## **PROJECTS**

#### Feast — Full-Stack Meal Planning Web Application

- Developed a full-stack meal planning app using React and .NET, following MCV architecture with controllers, services, and a repository pattern.
- · Implemented a responsive drag-and-drop calendar for meal planning, enhancing user interaction.
- Built a custom email service for sending HTML shopping lists and registration emails.
- · Employed Entity Framework (ORM) for database management and middleware for currency conversion of ingredient prices.
- · Built custom authentication system. Following best practices with access and refresh JWTs and protected routes and endpoints.

### Otaku Books — Full-Stack E-Commerce Web Application

- Created a responsive e-commerce web application with features like role-based access, shopping carts, user reviews, and a custom API for data retrieval.
- · Utilized React Router for seamless navigation across views.
- · Implemented user roles and authorization in .NET to manage access control for different users (e.g., admin, customer).

· Deployed as a SaaS solution on Azure's cloud platform.

# TFL Shortest Path Finder — C# Algorithmic Application

- · Built a C# application to calculate the shortest path in the London Transportation network using Dijkstra's algorithm.
- · Focused on optimising performance and scalability using only hand-coded data structures.
- · Led end-to-end testing, implemented the main loop algorithm, and developed non-library data structures.

# Page Turner — Book Tracking Mobile Application

- · Developed a mobile application for tracking reading habits using Swift and Firebase Firestore.
- Integrated Google Books API for easy book retrieval via barcode scanning and search.
- Implemented barcode scanning, integrated Google Books API for data fetching and mapping, and ensured the smooth operation of API integration.

## **EDUCATION**

# MSc in Software Engineering (First Class Honours)

University of Westminster · London, United Kingdom · September 2024

## **BA in History**

Saint Mary's University · Halifax, Canada · May 2014

## **EXPERIENCE**

## Head Teacher / Content Developer

Sesame Street English

August 2020 - September 2023, Taipei, Taiwan

- · Led and supported a team of ESL instructors, ensuring consistent teaching methods and promoting ongoing skill development.
- · Created detailed ESL curriculum materials, including lesson plans, workbooks, and assessments, tailored to enhance learning outcomes.
- · Developed gamified learning tools that significantly boosted student engagement and participation.

# **Teacher**

Gloria English School

February 2018 - July 2020, Taoyuan, Taiwan

- Instructed English to diverse age groups, with a focus on improving core language skills, resulting in over 90% of graduating students achieving a 6.0 or higher of the IELTS exam.
- · Developed interactive lessons using multimedia tools to effectively address different learning styles.