#### SUMMARY

A skilled fullstack developer, specialising in React, UI and UX, with experience managing back-end data. Graduated with a degree in Computer Science at the University of Manchester, including additional studies in AI, data visualization, marketing, and graphics. Experienced in working under pressure in a professional setting through the RAF(UAS), which provided leadership and collaborative abilities, alongside proficiency in piloting aircraft, weapons handling, and sailing. A team player who works hard to deliver to deadlines.

#### EDUCATION

#### University of Manchester

2021-2024

Bachelor of Science in Computer Science (2:1).

### Highfields Sixth Form, Matlock

2019-2021

A\*AAB in A level Maths, Physics, Psychology and Further Maths, with A in AS Chemistry.

## Highfields School, Matlock

2014-2019

10 GCSEs and a Level 2 Award in Engineering.

#### EXPERIENCE

## Fullstack Developer - KSR Development

2024-Present

Identified security vulnerabilities, inefficient database queries and code quality issues through software audits. Provided documentation and proposed solutions to reduce system complexity while maintaining functionality. Refactored, optimised and deployed Node.js applications to cloud platforms including GCP and AWS.

#### Website Designer - Acyleris Web Design

2024-Present

Delivered visually appealing and user-friendly websites for individuals and small businesses. Created a RESTful API using Firebase Functions, to send emails on contact form submissions via POST requests. Managed websites through Firebase Hosting and configured DNS settings for customer domains.

## Media and Frontend Developer - Hackchester

2023-2024

Developed and delivered a cybersecurity challenge for Student Hack 2024, teaching participants about vulnerability to DOM-based XSS attacks. Rebuilt the society website using React and SCSS to have a consistent theme with society graphics. Taught workshops including OSINT, Hashcat and Pen Testing.

#### Officer Cadet - RAF(UAS)

2021-2023

Reintroduced and instructed water training. Delivered presentations on current affairs and training expedition proposals. Managed aircrew at the RIAT air show, coordinating shuttle bus logistics. Developed skills in aircraft piloting and weapons handling, with practical application in a multiple day field exercise.

# PROJECTS

## Hiking Network route planner

2024

Tested and deployed a route planning web application that provides a smoother UX than competitors for outdoor activity planning. Managed route and user data across multiple Firestore collections and handled React State to render multiple routes on a map simultaneously. Designed custom icons for a consistent, lightweight UI.

## Lexicon+ learning platform

2023 - 2024

Developed a learning application with Vite, React and Firebase, integrating Three.js geometric games into multimedia worksheets. Managed image uploads with Google Drive OAuth 2.0 and implemented AI features for auto-generated flashcards and a maths assistance chatbot powered by a pre-prompted gpt-3.5-turbo model.

## UoM Blackboard browser extension

2023

Enhanced the UX of the University of Manchester's online learning platform by adding upcoming deadlines and useful links to the homepage. Improved design responsiveness and overhauled the site layout with CSS for a cleaner and consistent UI. Received a 5-star rating on the Chrome Web Store.

### SKILLS

- Frontend development: JavaScript, HTML, CSS, SCSS, React.js, MUI, Bootstrap, npm, Vite, Mapbox, Storybook, Figma, Three.js, Chart.js, Fetch API, OAuth 2.0 and reCAPTCHA.
- Backend development: Node.js, PHP, REST APIs, GCP, Firebase, Spring Boot, Python, C# and Java.
- Database management: data structures and queries in SQL (MySQL) and NoSQl (Firestore, MongoDB).
- Operating systems: experienced with Windows, Linux, and macOS; deployed an app on Android.
- Leadership and communication: RAF(UAS) training and team expeditions; presentations to audiences of up to 300 people; client communication at Acyleris; multiple successful university team projects.
- Version control: Git with GitHub and GitLab; at command line / in GitHub Desktop / in an IDE.