

Introduction

I am a hardworking, self-motivated student and enthusiast for computer science, with a strong foundation in software development, including mobile, desktop, and bespoke hardware projects. I am well-informed and experienced in all areas of software engineering and actively develop my skills and toolsets in my free time.

Skills

- **Languages:** Python, C#, JavaScript, TypeScript, SQL, Lua
- **Frameworks:** OOP, React Native, Linux, Self-hosting
- **Technologies:** Git, Docker, Oracle Cloud, AWS, Firebase, Supabase
- Embedded systems programming.
- Hardware design & electronic engineering.
- Proficiency in CAD software.
- Desktop + web app full stack development.
- Mobile app development – iOS + Android.
- Cloud computing.
- Graphics programming (game dev).
- Collaborative / team-based work.

Education and Qualifications

Hills Road Sixth Form College: 2023 – 2025

A Level Computer Science Predicted A

A Level Maths Predicted A

Extended Project Qualification Predicted A

A Level English Predicted B

Knights Templar School: 2018 - 2023

English Literature	9	English Lit	7
Maths	8	Geography	7
Computer Science	8	Biology	6
Product Design	8	Chemistry	6
Physics	8	French	5

AWS Certified AI Practitioner – in progress

ISC² CISSP – in progress

Employment

2021 – Present: **Research Assistant @ Tek Bros Ltd.** (Family business)

- Shadowing my father, cybersecurity consultant, at various prestigious companies.
- Have performed research into cybersecurity, cloud solutions.
- Earned valuable skills and observed professional practices in industry.
- Sponsored to study CISSP examination (qualification typically taken by people 2x my age).

2024 – Present: **Private Tutor for GCSE Computer Science**

- Taught 1:1 lessons with clients, including Y10 + Y11.
- Created personalised study plans for each student.
- Both online and in person service, gained self-employability skills.
- Further strengthened my knowledge in topics like Data Structures and Algorithms.

March 2022: **One week, Work Experience Placement @ CHQ Architects**

- Learnt industry software and hardware tools with assistance of architects in person.
- Shadowed professionals on job – learnt best practices.
- Learnt how large-scale solutions are handled between clients and developer.
- First exposure to professional work environment.

Personal projects

Mobile Studying App – Lockyn

TBA Commercial mobile studying app for GCSE + sixth form students.

- Mobile application for iOS + Android devices. 1st class support for web + desktop.
- Frontend written in React Native, using JavaScript/TypeScript.
- Backend using Google's Firebase (BaaS), non-relational database for big data handling.
- Stylish, professionally designed UX and Interface.
- Source code available on GitHub under proprietary license.

<https://github.com/pixeljammed/studyapp>

Calorie Tracking App – Fastgains

Source available calorie tracking app for users wishing to lose or gain weight.

- Cross platform application with iOS, Android and Desktop and Web clients.
- Utilises Facebook's *React Native* framework for a unified, single codebase for all platforms.
- Professionally designed UI, specifically for ease-of-use and simplicity.
- Uses cloud storage to store data across devices in PostgreSQL database.
- Learnt complex API usage, retrieving from online databases using HTTP requests.
- Backend is self-hosted with local, Docker deployed Supabase instances - vertically scalable.
- Programmed advanced algorithm / AI to give insight and analysis of user's eating habits.

Server hosting project

3+ yearlong virtual private server using Oracle Cloud services.

- Has hosted my personal website and portfolio and game servers which I administrated.
- Learnt systems architecture, low-level programming and cloud computing.
- Taught me a great deal about internet, networking, ports, MySQL, data structures.
- Implemented optimised code and server-client handling for maximum efficiency.
- Learnt Arch / Oracle Linux, encrypted connections (SSH), & automated server-side scripts.

Game Development Projects

I have worked on 3 different games in different engines, working both independently and on teams.

- First game
 - Written in LUA
 - Gained 15,000 unique players within first 3 months alone
- .NET Game Collection
 - Recreation of 3 famous games to varying degrees of complexity
 - Includes Battleships, Tetris and Blackjack
 - Learnt low-level graphics programming using WinUI and OpenGL render engine.
- Accessible 3D Platformer
 - Created as part of my EPQ project.
 - Developed in Godot, using both C# and GDScript.
 - Learnt agile/iterative design, following user feedback and responses in loop.
- Game Jam (upcoming, team project)
 - Will lead programming, design, and writing for team-based game competition in Godot engine.