

# KIERAN LOCK

## SOFTWARE DEVELOPER

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I am a versatile, dependable, and detail-oriented software developer proficient with Python and TypeScript, and experience in the full spectrum of software development environments and technologies. I'm a collaborative team player, with a track record of producing the highest quality software solutions to resolve challenges and propel business growth.

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## EDUCATION

### BSc in Computer Science | Bath University

October 2024 – June 2027

- Confirmed place for 2024
- Bath is ranked 6<sup>th</sup> for Computer Science in the UK

### A Levels | Brighton College

September 2021 – June 2023

- Graded A\* in Maths and Computer Science
- Graded A in Further Maths and Physics

### EPQ | Brighton College

September 2021 – June 2023

- Researched and wrote an A\* dissertation on the potential of augmented reality technology
- Presented the results of my research to an audience

### GCSEs | Brighton College

September 2018 – June 2021

- Graded 9 in Maths, Computer Science, Triple Science, English, Geography, and History
- Graded 8 in Further Maths, and 7 in French

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## EXPERIENCE

### Software Developer | Racing League Tools | Remote

December 2022 – Present

I work for a small SaaS startup, designing and implementing a new website for the team, through which downloads for the application and community participation via Discord are driven. As the lead developer for the Racing League Tools website, I was responsible for designing and implementing the UI, and determining a suitable stack with which I could build a scalable application capable of integrating with the rest of the services already provided by Racing League Tools.

### Assistant Studio Technician | Omni Digital Technologies LTD | Remote

June 2021 – August 2021

I enrolled on a traineeship with a small games development company, where I learnt key skills from industry professionals, including the ability to use Unity, Unreal Engine, and Blender, and key software engineering principles including testing and pair programming. The traineeship amounted to a final project, where I built a complete project using Unity, using all of the skills I had previously learnt.

### Team Leader | Pied Piper Activities LTD | Brighton, UK

June 2023 – August 2023

I worked for a children's holiday activities company, as a team leader at one of their local sites. As a team leader, I was responsible for organizing, planning, and delivering activities for large groups of children between the ages of 5 – 12 years old. During this period, I improved my ability to collaborate effectively and plan / manage projects, which are highly transferrable skills as a software developer.

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# PROJECTS

## Racing League Tools | [racingleaguertools.com](https://racingleaguertools.com)

I designed and implemented a website for Racing League Tools, which prompts visitors to download the app, join the associated Discord server, and support the project. The website showcases the application's features, and provides an intuitive interface for sharing rendering themes for the application with other users online.

## ScanDocs | [github.com/Kieran-Lock/ScanDocs](https://github.com/Kieran-Lock/ScanDocs)

I published a Python library capable of creating comprehensive documentation for Python projects of any complexity. ScanDocs uses Python's dynamic nature to efficiently index a Python package, and build a fully-featured documentation website, complete with customizable themes and content, and complex searching functionality.

## SQLiteFrame | [github.com/Kieran-Lock/SQLiteFrame](https://github.com/Kieran-Lock/SQLiteFrame)

I created and maintain SQLiteFrame, a Python ORM for SQLite which uses advanced Python techniques to provide the most simple and intuitive API possible. Developers can connect to local databases, build, and execute complex CRUD queries, and build schemas from existing databases for easy ORM migration.

## Reddit GOD | [github.com/Kieran-Lock/Reddit-GOD](https://github.com/Kieran-Lock/Reddit-GOD)

I developed a fully-featured YouTube Shorts video generator, which uses the Reddit API to find topical discussion threads to narrate. Reddit GOD has customizable video subjects, lengths, and background footage, and has the capability to automatically upload batches of videos to the YouTube platform, with zero human intervention.

## XtermGUI | [github.com/Kieran-Lock/XtermGUI](https://github.com/Kieran-Lock/XtermGUI)

I developed and maintain XtermGUI, a Python framework for creating interactive GUIs in xterm terminals. By decoding streams of ANSI escape codes, XtermGUI provides the tools to build complex and aesthetic applications in the terminal with a Python API, including an input system (with mouse events), and layered GUI support.

## AutoKahoot | [github.com/Kieran-Lock/AutoKahoot](https://github.com/Kieran-Lock/AutoKahoot)

I created AutoKahoot, a powerful quiz bot, by reverse engineering the Kahoot.it website, which is capable of achieving a perfect score in live Kahoot quiz games. By using CometD, AutoKahoot uses websockets to pose as a legitimate player, whilst factoring in customizable response times to emulate convincing human-like behaviour.

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# SKILLS

## Web Development

Svelte & SvelteKit  
React & Next.js  
Tailwind CSS  
ASP.NET (MVC)  
Flask

## Languages

TypeScript  
Python  
CSS & HTML  
Rust  
C Sharp

## Databases

Firebase  
SQLite  
PostgreSQL  
SQLAlchemy

## Development Tools

Git & GitHub  
Linux  
JetBrains IDEs  
VS Code

## Web Services

Google Cloud Platform  
Iconify  
Vercel  
Docker

## Other Frameworks

Tauri  
Arduino  
Unity  
Unreal Engine

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# REFERENCES

## Olga Ruszczak | Brighton College

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## Charlotte Gill | Pied Piper

References available on request.

## Harriet Freestone | Brighton Dolphins

References available on request.