

# Cem Ratip

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Portfolio Website: [cemratip.co.uk](http://cemratip.co.uk)

GitHub: [github.com/cemratip](https://github.com/cemratip)

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## Education

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### King's College London

Sep 2021- Current

*MSci Computer Science*

First year module results: ELA (94%), FC1 (94%), CS1 (94%), IPP(88%), PPA (78%)

### The Trinity School of John Whitgift, Croydon

Sep 2019 - July 2021

4 A-Levels: Maths (A\*), Further Maths (A\*), Computer Science (A\*), Economics (A)

### Royal Russell School, Croydon

Sep 2011 - July 2019

10 iGCSEs including Maths (9), English Literature (9), English Language (9)

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## Work Experience

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### Fix It (IT Repair Store), London

June 2021 - Aug 2021

*Employee*

- Interacted with customers to give repair cost quotes and timeframes.
- Repaired faulty laptops and phones which developed my knowledge of computer hardware.

### Satalia (AI Enterprise), London

June 2019 - July 2019

*Apprentice*

- Created an information website from scratch in a team of 3.
- Used HTML and CSS for front-end and JavaScript for back-end development.
- Researched the progression of AI since the 1950s and added relevant information to the website.

### EIP (Patent Law Firm), London

June 2019 - July 2019

*Apprentice*

- Processed client's patent applications.
- Completed data entry tasks with accuracy and efficiency.
- Developed proficient Excel skills.

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# Software Development Experience

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**Links to the following projects are on my portfolio website: [cemratip.co.uk](https://cemratip.co.uk)**

## **Desktop Application - Crypto Arbitrage Monitor**

I am programming a desktop application that constantly monitors two or more, user-specified, exchanges and alerts users to arbitrage opportunities.

- Languages and services used: Python, Java(FX), MySQL, AWS RDS, AWS EC2, AWS Lambda
- Learned how to program with databases in Python & Java.
- Improved my problem solving skills, for example, to find solutions to bypass API rate limits.

## **Google Chrome Extension - Search Tenure for Rightmove**

I created and published a Google Chrome extension that filters property results on the RightMove website, based on their tenures.

- Developed my skills in JavaScript and HTML.
- Learned how to web-scrape in JS, program with asynchronous functions.

## **Python Script - Automated Cryptocurrency Trading Algorithm**

I programmed a cryptocurrency trading bot in Python that runs 24/7 on an AWS EC2 instance. It uses the RSI indicator to make trading decisions. Although using RSI alone is unreliable, after 2 weeks of testing, it made a 7% profit and can be extended to include more indicators in the future.

## **Game Development in Unity**

I am developing an online multiplayer war game in Unity 2D using C#. I have learned how to:

- Use game physics to make objects interact with each other and respond to user inputs.
- Create sprites and animate them.
- Use my Further Maths knowledge of 3D vectors to transform objects and calculate distances.

## **Team Software Development Projects**

I have also worked as part of a team to complete projects, namely an environmental simulator and an Airbnb property data analyser. Undergoing these projects taught me how to use branches on GitHub, to collaborate efficiently with team members.