

# Mustafa Khan

<https://www.linkedin.com/in/mustafakhan23> | 07398267597 | [mustafaarshad237@gmail.com](mailto:mustafaarshad237@gmail.com)

## EDUCATION

### University of Warwick

Warwickshire 2022-2025

BSc Computer Science

Expected degree: 1<sup>st</sup> Class Honours

Relevant Modules: Software Engineering, Algorithms, AI, Digital Business, Logic, Mathematics II, Professional Skills

### Wilson's School

Sutton, London 2015-2022

A level: A\*A\*A\*A in Further Maths, Maths, Economics, Geography GCSE: 11 subjects Grade 9-7

## WORK EXPERIENCE

### NatWest Markets

London

Software Engineering Summer Intern

June 2024-August 2024

- Spent 8 weeks in the "Fixed Income Algo" team, learning about the pivotal role algorithms play in trading
- Took responsibility of developing UIs in React, integration and unit tests, and writing technical documentation
- Delivered code under an agile time schedule, solving problems and pushing code every 2 hours using version control
- Lead a team to design an innovation to improve sustainability, which the COO of Digital X praised highly
- Conducted data analysis about AWS for an employee optionally, being keen to learn about cloud system architecture

### Warwick Innovative Studio

Birmingham

Software Developer/ Sales & Lead Generations

August 2023- June 2024

- Communicated with potential clients to generate leads in the business team, increasing project leads by 33% alone
- Sourced projects and stepped up to code both front and back ends, actively listening to both client and team demands
- Multitasked between sales and programming, resulting in gaining a more senior role mentoring the new developers

### Deloitte LLP

Remote

Technology Risk Consultancy Intern

June 2023- July 2023

- Ran as team leader when consulting an FMCG company on how to can apply Web3, Blockchain and Metaverse
- Delegated work and scheduled calls for the team in 7 different time zones, a test of organisation and problem-solving
- Delivered a presentation about the potential 'Emerging and Innovative Technologies' have to increase consumer engagement and supply chain transparency, and discussing research on any potential security risks

### Warwick Pakistani Society

Warwickshire

President

June 2023- June 2024

- Built the biggest Asian society in the university, hosting 36 events and gaining 3 sponsors while running a committee
- Critically thought about how to boost engagement for charity, raising over £1200 by partnering with 5 organisations

### EO Tutoring

London

Founder

January 2023- Present

- Founded a tutoring business and, through analysing students' unique learning styles, received 100% positive reviews
- Created the website in Flask, and marketed on Facebook, promoting the USP of 'tailor-made lessons for each child'

## PROJECTS

### Fixed Income Order Book

June 2024-August 2024

- Had sole responsibility over creating a UI to display strategy and order book information sourced by NatWest traders
- Advanced React and JavaScript skills by utilising external libraries like MaterialUI, and included testing for the site
- Deployed the web application to the main server, receiving 81% positive comments from NatWest traders

### Stock information Web App

January 2024-April 2024

- Collaborated to present all the data about companies on one site, to boost efficiency for market data enthusiasts
- Used web scraping to find the share price history, news articles and any quantitative analysis done for each company
- Generated a sentiment analysis with APIs scanning reddit posts, and used to make a prediction on future stock prices

### Connect-4 Learning AI

October 2023-January 2024

- Conducted research on the best decision algorithms to program an AI to play 'Connect-4' perfectly in Python
- Using the Mini-max algorithm with alpha beta pruning, the bot had a 100% success rate on 3x3 up to 6x6 boards

### Movie Data Application

October 2022 – January 2023

- Re-engineered data structures using Java arrays to store facts about movies, considering time and space complexity
- Was analytical and innovative in selecting the best structure to use for each set of data (E.g. AVL tree vs HashMap)Z

## SKILLS & INTERESTS

**Technical Skills:** Java, Python, C, JavaScript, SQL, Flask, React, HTML, CSS, Linux, GitHub/Gitlab

**Languages:** English, Urdu/Hindi (Native Proficiency), German/Spanish (Basic Proficiency)

**Achievements:** Warwick 1<sup>st</sup> XI Cricket Player, Wilson's School 1<sup>st</sup> XI Football Player

Finished in the top 15% of the year at University

Gold and Kangaroo awards in UKMT maths challenges (Junior, Intermediate and Senior)

Making a Reinforcement and Machine learning app, to help learn languages, for a third year project