Mustafa Khan

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EDUCATION

University of Warwick Warwickshire *2022-2026*

MSc Computer Science Expected degree: 1st Class Honours

Relevant Modules: Software Engineering, Algorithms, AI, Digital Business, Logic, Mathematics II, Professional Skills Wilson's School **Sutton, London** 2015-2022

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

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 critical role algorithms play in trading strategies
- Took responsibility of developing 100+ integration and unit tests, UIs in React, and writing technical documentation
- Delivered code under an agile time schedule, solving problems and pushing code every 2 hours using version control
- Led 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, driven by a long-standing interest in 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 a promotion to a senior role, mentoring the new developers

Deloitte LLP

Technology Risk Consultancy Intern

June 2023- July 2023

- Ran as team leader when consulting an FMCG company on how to 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 how the potential 'Emerging and Innovative Technologies' can increase consumer engagement and supply chain transparency, and discussing research on any potential security risks

Warwick Pakistani Society

Warwickshire

President

Founder

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 https://www.eotutoring.com

January 2023- Present Founded a tutoring business and, through analysing students' unique learning styles, received 100% positive reviews

Leveraged SEO in my Flask website to promote the USP 'tailor-made lessons for students', on top of Facebook Ads

ASHMN Investments Limited

Property Manager

November 2022- Present

- Manage an Airbnb, handling bookings and automating both cleaning and calendar synchronisation to optimise time
- Expanded business to 2 other sites, while earning 'Superhost' status on Airbnb, elevating booking rate by 120%

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 with Jenkins, earning 96% positive feedback from NatWest traders

Stock information Web App

January 2024-April 2024

- Collaborated to present all the data about FTSE 100 companies on one site, to boost efficiency for market 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 engineer 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 from 3x3 up to 6x6 boards 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)

SKILLS & INTERESTS

Technical Skills: Java, Python, C++, JavaScript, (Postgres)SQL, Flask, React, HTML, CSS, Linux, GitLab, OCaml

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

Achievements: Warwick 1st XI Cricket Player, Wilson's School 1st XI Football Player

Finished in the top 15% of the year at University, gaining special commendation from the Department

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