# **ZAID KHAN**

London, United Kingdom (willing to relocate) • +44 7553 110515 • <u>zfkhan321@gmail.com</u> LinkedIn: linkedin.com/in/zaid-khan-084905171/. GitHub: https://github.com/zaid5678

#### **EDUCATION**

**University College London** 

London, United Kingdom

MEng Mathematical Computation (Integrated Masters); First-Class Honours

Graduated: 2024

• Dissertation topic: "Unleashing BERT: Transforming Wikipedia into an Answering Machine" (supervised by UCL NLP group, using **HuggingFace** tools)

# **WORK EXPERIENCE**

AMAZON (AWS)

Hybrid

### Software Development Engineer (SDE)

December 2024 - June 2025

- Contributed and maintained control plane components for Amazon RDS (Relational Database Services), focusing on scalable
  orchestration and lifecycle management of relational database systems.
- Instrumented logging to monitor data pipeline performance, reducing debugging time by 35%.
- Cut test execution time from 45 minutes to 15 minutes, achieving a 67% decrease.
- Wrote optimised SQL queries to filter deployment regions marked as Generally Available (GA), **reducing region selection time** by 40% and improving deployment accuracy across 10+ services.

SKY London, United Kingdom Machine Learning Intern September 2021

- Programmed an ML tool to enhance VAR content for highlights by accurately detecting significant football events, including red cards, handballs, and penalties, with VAR triggers identified in one out of every five matches on average.
- Slashed the time required to compile these events by 40%.
- Trained and engineered the model in AWS using SageMaker, securely managing video data with S3, and deploying via Lambda.
- Delivered an engaging demonstration of the program to 10 staff members in the Creative Technology & AI department, effectively communicating the tool's benefits to both technical and non-technical stakeholders within a **Scrum/Agile project** management framework.

ZAND BANK
Remote

Data Science Intern

August 2021 - September 2021

Engineered an MI model in Tensor Flow, extracting and analysing data from Value Finance to predict individual companies!

- Engineered an ML model in **TensorFlow**, extracting and analysing data from Yahoo Finance to predict individual companies' equity values by training on pre-COVID data and applying it to the challenging environment of the COVID-19 pandemic.
- Devised a predictive model using historical data to assess the future value of borrowing companies, thereby refining the quality of financing decisions and achieving an **accuracy rate of 63%**.

ZIP CO LIMITED Remote

Data Science Intern

June 2021 - July 2021

- Evaluated 30 consumer brands to identify key success criteria for brand extensions, conducting thorough data analysis to determine preferences and recommending 10 essential criteria to predict user response to brand equity.
- Leveraged **web scraping** techniques using **JavaScript** to extract data from various websites, identifying the most popular products in the market among consumers.
- Extracted customer information from the company database using **SQL** and **Microsoft Azure**, ensuring accurate data retrieval for analysis and reporting, with a **99% reporting accuracy**.

### PROJECT EXPERIENCE

### DEEP LEARNING University Project

London, United Kingdom

March 2024 – April 2024

- Trained and evaluated an MAE in PyTorch on the Oxford Pet dataset, and fine-tuned using COCO dataset, achieving 86.5% accuracy.
- Applied various noise and masking techniques, achieving an accuracy of at least 70% for all combinations.

#### FULL-STACK DEVELOPMENT

London, United Kingdom

**Buzz Social** 

July 2021 – September 2022

- Developed a social application with four others, focused on London's nightlife, rapidly attracting over 1,000 users in the first three weeks and surpassing 7,000 users within six months.
- Designed and implemented a dynamic heatmap in **Dart** to highlight popular nightlife spots, boosting user engagement, and developed a secure login page with advanced verification to enhance user trust.
- Led the back-end development using **Google Firebase**, coding and deploying robust server-side logic while efficiently managing version updates through **Git**.

### **TECHNICAL SKILLS**

Front-End: React.js, Dart, JavaScript, HTML5, CSS, modern JavaScript tooling (Webpack/Babel)

Back-End: Python, Java, C, C#, SQL, TypeScript

Cloud Service Platforms: AWS, Azure

Machine Learning Frameworks & Libraries: TensorFlow, PyTorch, HuggingFace models