# Hamid Jamal

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Results-driven MEng Computer and Electronic Systems student predicted a Distinction, with hands-on experience in machine learning, embedded systems and various different projects; including a fake news detector with a 99.7% accuracy. Seeking to bring my skill set to apply them in a challenging, graduate job.

## **EDUCATION**

#### **University of Strathclyde**

Sept 2022 - July 2026

Computer and Electronic Systems (MEng) - Predicted Distinction - Modules from CS and EEE

Cardiff High School Sept 2015 - Aug 2022

A levels: A\*A\*A - Maths, Physics and Computer Science GCSEs: 12 A\* to B including English and Mathematics

# RELEVANT SKILLS

Python | C | Java | Tensorflow | Machine Learning | Neural Network | Linear Regression | Jupyter Notebook | Firmware Development | Teamwork & Leadership | Teamwork | Communication Protocols | Github | ESP32 | STM32 | MSP430

## **PROJECTS**

#### **Chess Engine**

- Built a chess engine from scratch in Rust with a rating of 1200 elo. Implements features such as: UCI support. Implements beta-alpha pruning, iterative deepening, quiescence search, killer moves, history heuristics, Late Move Reduction and Static Exchange Evaluation (SSE). Using Zobrist hashing for transposition tables and evaluates positions using Piece-Square Tables (PST)
- Approach was made with bitboards and bit manipulation to increase speeds to achieve a high nodes per second

# **Neural network projects**

- Researched and developed multiple Machine Learning based algorithms, including developing deep neural networks, to predict several various situations
- Utilised Machine Learning to create a prediction model for: house prices, survival rate for passengers on the titanic (79% accuracy), an Iris identifier (100% accuracy), a SMS spam filter (98.4% accuracy) and fake news detector (99.7% accuracy)

#### Remote display control via Wi-Fi

- Utilised personal developed display for the MSP430 ST7789-controlled display with a ESP32 to enable wireless communication to control the display from a webserver from a GUI
- Communicated between the two MCU's via UART whilst communicating with the ESP32 hosting a web server

# **EMPLOYMENT**

# Powerforce GB, Brand Representative

Feb 2022 - March 2022

- Engaged with the general public to provide clear technical explanations in a clear manner, boosting brand reputation
- Developed strong customer service, multitasking, and teamwork skills in fast-paced environments

# EXTRA CURRICULUM

# Strathclyde University Powerlifting Club, Treasurer

July 2024 - July 2025

- Responsible for allocation and spending of the club budget for the academic year
- Took initiative and collaborated with other clubs to organise multiple cross-university competitions

# University of Strathclyde Eco-Vehicle, Battery Head

Sept 2022 - Aug 2023

- Responsible for managing a team to design and create a battery according to the guidelines for competition
- Led the foundations of designing and producing a custom BMS for future teams to utilise

# **Cancer Research Wales, Retail Assistant**

June 2021 - April 2022

- Provided excellent customer service and collaborated with team to meet Gift Aid and sales targets
- Supported operations, including handling transactions, queries and maintaining a welcoming store environment