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Education & Qualifications:

MEng – Electrical & Electronic Engineering with Management *Oct 2020 – June 2025*
Imperial College London – London, UK
Key Modules: C++, Computer Architecture, Digital Systems Design, Deep Learning (NN, CNN, NLP, Autoencoders)
Gap Year (2022–23): Princeton University Algorithms and Data Structures Online, Caltech Machine Learning Online

International Baccalaureate – Bilingual Diploma (42/45) *Graduated June 2020*
International School Hannover Region – Hannover, Germany
Higher Level: Mathematics **(7/7)**, Physics **(7/7)**, Economics **(7/7)**, Chemistry **(5/7)** Standard: English A **(7/7)**, German A **(7/7)**
Achievements: IB Diploma Programme valedictorian, authored 60-page book on climate change, raised €1500 to refurbish the school's gym

Technical Skills: C++, Verilog, Python (Keras, TensorFlow), Java, MATLAB
Languages: English (Native), German (Native), Turkish (Basic proficiency)

Experience & Projects:

Imperial College London – London, UK

Sign-Language-to-Text Translator – ICHackathon 2024 *Feb 2024*
- Trained neural network in Python that could translate sign language from a live video feed into text with a 93% accuracy
- Connected to quiz-style web app where students can compete against each other in a classroom environment

Embedded Cosine Calculator on FPGA *Jan – March 2024*
- Verilog implementation of pipelined CORDIC algorithm, maximising throughput and reducing latency by half
- Developed custom floating-to-fixed point conversion hardware 85% faster than Intel converter IP
- Tested using Monte Carlo methods on MATLAB to ensure precision of 10^{-6} with 95% confidence

"Mars Rover" – Second Year Group Project *May – July 2022*
- Implemented maximum-power-point tracking algorithm for solar panels, increasing charging efficiency by 20%

"Analogue Music Synthesiser" – First Year Group Project *May – June 2021*
- In charge of creating an integrator using analogue components on LTspice, accommodating all audible frequencies – up to 20 kHz

Single-Core CPU Implementation *Feb – March 2021*
- Designed a fully functional CPU from primitive logic gates, capable of executing over 3000 lines of code
- Successfully compiled 11 unique machine code instructions crucial to the successful operation of any modern device
- Pipelined to increase efficiency of instructions by over 30%

International School Hannover Region – Hannover, Germany

Collision Prediction Algorithm – Mathematics Report *July – Dec 2019*
- From first principles related multiple bounded planes in a 3D space to a time-varying parameter, allowing for the modelling of dynamic objects in space – awarded highest grade in cohort of over 50 people
- Capable of predicting collisions in space between stray projectiles and satellites, with extension to air traffic collisions

Web-Learning App for Sustainable Energy *March – April 2018*
- Developed interactive website with embedded, self-created 2D game and an animation made in Adobe Flash, designed to gamify the learning experience and engage audiences

Activities & Leadership:

Imperial College Bars – Duty-Manager and Bar Staff *Oct 2021 – March 2023*
- **Duty-Manager** as of August 2022, leading a team of up to 15 people, including bar staff, security and the kitchen team
- Managed majority of 2022 FIFA World Cup games, with turnouts of up to 800 guests

Imperial College Union – Electrical & Electronic Engineering Society (EESoc) Events Officer *Oct 2022 – June 2023*
- Liaised with external companies and the student union to organise social events throughout the academic year, including securing over £20 000 to fund EESoc's annual black-tie dinner with over 150 attendees

International School Hannover Region – Fitness Instructor *June 2019 – Dec 2019*
- Mentored 10+ students twice a week in callisthenics to aid them in achieving a healthier lifestyle