

**PROFILE**

A current 2<sup>nd</sup> year undergraduate student at King's College London, aiming to step into the world of robotics and machine learning – with a particular interest in robotic prosthetics.

**EDUCATION****King's College London**

London, England

*BSc in Artificial Intelligence with a Year in Industry*

2024-2028

Classification: Grade achieved to date – 1<sup>st</sup>

Relevant Coursework:

- Robotic movement with ROS in Python:
  - Controlled a simulated robot in a ROS1 container in Python for Linux Ubuntu.
  - Utilised state machines (SMACH), object recognition (YOLOv4), and speech recognition (ros\_vosk package).
  - Attained 100 in the coursework and have a solid understanding in using ROS for controlling robots.
- Game development in Java:
  - Produced a JavaFX game in a group of 4 that had real time collision detection and random map generation.
  - The game played like the Super Mario games where the player can control a character and makes it through a series of randomly connected rooms.
  - Learnt how to work as a team using github, delegating tasks and features to each person.
  - Attained a 90 in the coursework.

Extracurriculars:

- Joined the Learning Autonomous Service Robots (LASR) team, which is a robotics team that participates in service robot challenges at major competitions such as the Robocup competitions.

**St Ignatius College**

London, England

*A-Levels (Mathematics, Further Mathematics, Physics, Computer Science)*

2022-2024

Grades: Awarded A\*A\*AA for these subjects respectively.

*GCSEs (Including Mathematics, English Language, Computer Science)*

2017-2022

Grades: Awarded 999998887 with 9s in the above subjects

**PROJECTS:**

- Frame Recurrent Video Super Resolution:
  - A video super resolution algorithm that takes in a low-resolution video and outputs a high-resolution video.
  - Implemented in Pytorch, uses 3 CNNs to create estimates of the high-resolution version of the low-resolution frame and uses this estimate to help create the estimate for the next frame.
- Gesture Control Robot:
  - Developed a program in a group of 3 which takes hand signals from the user via the camera and controls a robotic arm to perform an action.
  - Comprised of a ROS2 environment Gazebo simulation and a CNN designed in Pytorch to recognise and process video feed into hand signals.
- More information about these projects can be found on the website linked at the top of this CV.

**WORK EXPERIENCE****Forage & JPMorgan**

Online

**Virtual Software Engineer Experience**

June 2023 – July 2023

- Configured an interface with a stock price data feed.
- Utilised JPMorgan Chase & Co. frameworks and tools to display data visually for traders.

**SKILLS AND INTERESTS / AWARDS AND ACHIEVEMENTS****Technical:** Proficient in: Python, Java, Git, Pytorch, Pandas and Linux Ubuntu terminal commands.**Languages:** English (native)**Interests:** Playing video games and chess