

Profile:

Motivated undergraduate and Python-focused developer with strong foundations in problem-solving, automation, and robotics. Experienced in building end-to-end technical projects spanning machine learning, SaaS systems, and ROS-based robotics, within Linux environments, with a growing interest in robotic automation and applied AI.

Experience:

- King's Undergraduate Research Fellow (KURF) | King's College London (June 2026 - Current):
 - Undertaking funded research under Dr. Matteo Leonetti on the project "Robots for Healthy Ageing: Engineering Socially Assistive AI".
 - Designing and implementing Human-Robot Interaction (HRI) behaviours for the PAL Robotics TIAGo platform, deploying machine learning algorithms and LLMs for robust voice command recognition.
 - Executing structured research cycles, including literature reviews, experiment planning, and quantitative data analysis on robot success rates and navigation safety for frail populations.
- Sales Assistant | Screwfix (September 2024 - Current):
 - Built rapport with regular customers by identifying patterns in issues and applying proven solutions, demonstrating problem-solving and customer focus.
 - Supported warehouse operations by organising inventory, restocking efficiently, and maintaining a clean workspace to improve productivity.
- Mentoring Work Experience | St Ignatius College (November 2022 - July 2023):
 - Delivered one-to-one and small-group maths support, adapting explanations to individual learning needs.
 - Developed clear communication skills through academic mentoring and informal student support.
- Volunteer retail assistant | North London Hospice (April 2021 - November 2021):
 - Collaborated effectively within a small team, often only 2–3 members, to deliver consistent service.
 - Balanced responsibilities independently by managing a clean, organised, and well-stocked storefront while assisting customers simultaneously.

Extracurricular

- LASR team member | Sensible Robot Research Lab @ KCL (October 2025 - Current)
 - Competed internationally at RoboCup Incheon 2026 in South Korea, porting old code and producing code for Human-Robot Interaction (HRI) and General Purpose Service Robot (GPSR) tasks, as part of a larger team.
 - Presented informative posters detailing the team's development and open-source codebase to an international audience, engaging with research from other global robotics teams.
 - Assist in onboarding and mentoring new student members, training them on the team's codebase and ROS architecture.
- Cadet Staff Sergeant | Combined Cadet Force (November 2019 - July 2024):
 - Led, instructed, and mentored younger cadets while representing the contingent at recruitment events, showcasing leadership and teamwork. As well as organised and managed cadet activities, ensuring high standards of discipline and performance during drills and exercises.
 - Displayed resilience, adaptability, and clear decision-making under pressure by often commanding training exercises and expeditions, leading a platoon (~24) of cadets on multiple occasions.

Education:

- King's College London: [2024 - 2028 (Projected)]
 - Artificial Intelligence with a year in industry' BSc
- St Ignatius College [Sept 2017 - June 2024]
 - 3 A-Levels + EPQ : Achieved A*, A, A in Maths, Further Maths and Computer Science respectively.
 - 9 GCSE (Attained a grade average of 8.2)

Projects:

- Loan Approval Predictor (Logistic Regression / Python)
 - Designed and implemented a logistic regression neural network from scratch in Python to predict mortgage approval outcomes.
 - Focused on model architecture, numerical optimisation, and data preprocessing without high-level ML frameworks.
- Music Recommendation SaaS (Full-Stack / ML / DevOps / Git / Cloud)
 - Built a fully containerised and deployable SaaS platform integrating computer vision and ML models.
 - Used YOLO and BitNet to infer user context and generate real-time music recommendations.
 - Emphasised modular design, containerisation, and deployment-ready architecture.
- LASR Open-Source Codebase & HRI Software (ROS1/ROS2 / Python / Open-Source)
 - Researched and ported the official LASR team codebase to newer software architectures, successfully migrating systems from ROS 1 to ROS 2.
 - Developed and integrated Human-Robot Interaction (HRI), autonomy, computer vision, and LLM concepts for a physical TIAGo robot.
 - Produced competition-ready code deployed internationally at RoboCup, and successfully demonstrated the software in public settings including the KCL Informatics Showcase and Open Days.