Giacomo Demetrio Masone

ROBOTICS & AUTOMATION ENGINEER

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LinkedIn

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Qualification Summary

Detail-oriented graduate with strong hands-on experience in mechanical design, robotic systems integration and engineering analysis. Solid foundation in AI and robotics through Master of Science in Robotics; designing and deploying machine learning models, developing predictive analytics solutions and engineering intelligent systems to solve complex problems.

Data Analysis & Statistical Modelling

♦ Passionate for analyzing large datasets to uncover trends, patterns and insights.

♦ Capable of creating statistical models to predict outcomes or solve business problems.

Robotics Systems Development

♦ Potential for designing, building and programming robotic systems and AI automation platforms.

♦ Capacity to understand hardware-software integration for robotic functionalities.

Autonomous Systems & Reinforcement Learning

♦ Ability to build intelligent systems capable of decision-making and adapting to environments autonomously.

♦ Talent for reinforcing learning algorithms for tasks, such as robotics navigation and game-playing AI.

Professional Skills

♦ Excellent communicator and collaborator; instrumental in nurturing constructive relationships at all levels.

♦ Equipped with strong analytical, interpersonal, time management, problem-solving skills, curiosity and adaptability.

Academic Achievements

King's College London, London, UK – Master of Science in Robotics (Distinction)   2025 – 2026

♦ Engaged in advanced robotics technologies, including autonomous systems, artificial intelligence and human-robot interaction.

♦ Developed expertise in control systems, machine learning and sensor integration for robotic applications.

♦ Learned skills in advanced robotics, computer vision, intelligent systems and robotic programming.

Associateship of King's College London FT   2025 – 2026

Coventry University, Coventry, UK – Bachelor's in Mechanical Engineering (Upper Second-Class Honours)   2020 – 2024

♦ Built a strong foundation in thermodynamics, fluid mechanics, solid mechanics, system design and manufacturing processes.

♦ Utilised CAD and engineering software tools to produce detailed designs, assemblies and technical drawings.

♦ Demonstrated strong analytical, problem-solving and teamwork skills through hands-on labs and multidisciplinary engineering projects.

Work Experience

Mentor at Project Access International 2025 – 2026

- Supported mentees in developing strong personal statements and application strategies tailored to competitive global universities.

Bio-Inspired ML for Metamorphic Legged Robots – Centre for Robotics Research (CoRe), King's College London, UK 2025

- Applied mechanical design principles and kinematic analysis to achieve controlled folding and motion behaviour.
- Conducted iterative testing, debugging and refinement to improve mechanical robustness and system performance.

Quadruped Robot Gait Control Using Reinforcement Learning – Human-Robot Interaction Lab, Coventry, UK 2024

- Designed and developed a robotic system, improving the gait control by implementing reinforcement learning algorithms.
- Conducted extensive testing and troubleshooting of robotic systems to identify and resolve mechanical issues.

Research Assistant – Coventry University's Centre for Computational Sciences & Mathematical Modelling (CSM), Coventry, UK 2023

- Managed EU-funded CSI-COP projects focusing on GDPR compliance evaluation.
- Investigated extent of surveillance whilst browsing websites or using mobile applications.

Volunteer – Coventry University's CUSU Organization 2021

- Supported the planning and delivery of student-led events, contributing to engagement, participation and campus community building.

Licences & Certifications

President's Global Leadership Award – King's College London 2025

Dean's Commendation Award – King's College London 2024 – 2025

Microsoft Cybersecurity Architect (SC-100) Cert Prep: 3 Design Security for Infrastructure by Microsoft Press – LinkedIn 2023

Affiliations

Member – Institution of Mechanical Engineers (IMechE), IET, IEEE 2026

Technical Proficiencies

Programming: Python, C/C++, PHP, JavaScript | **Robotics & Control:** ROS/ROS2, MATLAB/Simulink, Gazebo, PyBullet, MuJoCo | **Perception & ML:** OpenCV, PyTorch, TensorFlow, Scikit-learn, CUDA | **Mechanical & CAE:** SolidWorks, Fusion 360, AutoCAD, ANSYS, Abaqus | **Systems:** Arduino, Linux, Git | **Data/Cloud:** SQL (MySQL), AWS | **Dev Tools:** VS Code, Spyder, Google Colab

Languages

Italian (Native), English (Fluent), Spanish (Fluent)

I have indefinite permit to work in the UK without visa sponsorship.