

Enis Yalcin

Robot Learning and Legged Robotics

+44 7900 158 858 | enis.yalcin.24@alumni.ucl.ac.uk

[Portfolio](#) | [LinkedIn](#) | [E-SDS paper](#) | Open to relocation

UCL Robotics and AI MSc graduate with Distinction, first-author research on humanoid reinforcement learning, and an independent quadruped under development.

Education

University College London | 2024-2025

MSc Robotics and Artificial Intelligence | Distinction

King's College London | 2023-2024

MSc Engineering with Management | Distinction

Sabanci University | 2018-2023

BSc Industrial Engineering | Finance minor | GPA 3.3/4.0

Research and Development

E-SDS: automated reward generation for humanoid locomotion

UCL MSc dissertation | Robot Perception and Learning Lab | 2025

Supervisor: Prof Dimitrios Kanoulas | First-author paper accepted at RiTA 2025

- Combined vision-language model outputs with terrain sensing to generate and refine executable reward functions for PPO training.
- Built the Isaac Lab training pipeline with 3,000 parallel simulated Unitree G1 robots; evaluated policies on bumps, gaps, obstacles and stairs.
- Reported 82.6% lower velocity tracking error on simple terrain than a manually designed reward baseline; demonstrated stair descent in simulation.

Independent quadruped platform

Independent development | Ongoing

- Developing a 12-actuator quadruped across CAD, four-bar knee mechanics, electronics, CAN communication and control software.
- Developed Pinocchio dynamics checks, weighted whole-body QP control and a perceptive NMPC planning interface.
- Tested the simulated system with UKF state estimation and sensor noise; physical robot testing is the next step.

Technical Skills

Python, C++, MATLAB, PyTorch, Isaac Lab, ROS/ROS2, Gazebo, OpenCV, Pinocchio, PPO, NMPC, QP control, EKF/UKF, Git, Linux, CAD and CAN integration.