



Durham
University

Robotics – Planning and Motion

COMP52815

Introduction

Prof Farshad Arvin & Dr Junyan Hu

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Room: MCS 2058

Prof Farshad Arvin

Professor of Robotics

- BSc: Computer Hardware Engineering (2000-2004)
- MSc: Computer System Engineering (2008-2010)
- PhD: Computer Science (2012-2015)

Research Topics:

Biohybrid Robotics, Swarm Robotics, Bio-inspired Swarm

Office: MCS 2058

Labs: MCS 1039 – MCS 1005d

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Dr Junyan Hu

Assistant Professor in Robotics

- BSc: Automation (2011-2015)
- MSc: Control and Systems Engineering (2005-2016)
- PhD: Electrical and Electronic Engineering (2016-2019)

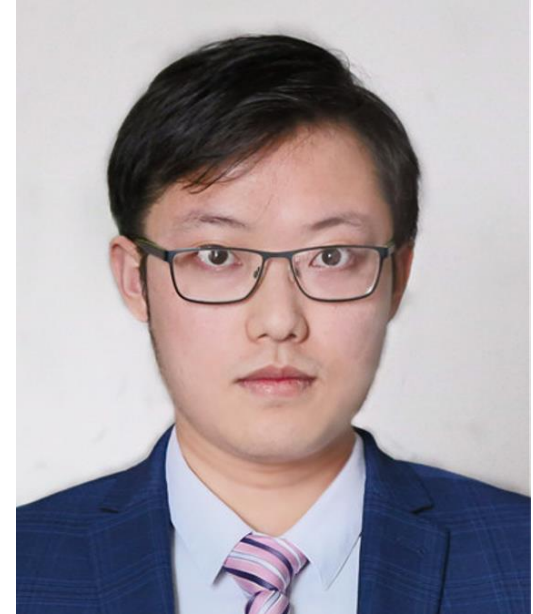
Research Topics:

Swarm Robotics, Multi-Agent Systems, Autonomous Vehicles

Office: MCS 2060

Labs: MCS 1039 – MCS 2057

Email: junyan.hu@durham.ac.uk



Lectures:

Date	Week	Time	Topic
Mon, 7 th Oct	1	9:00-11:00	Intro. Robotics, Actuators, Sensors, Manipulator
Mon, 14 th Oct	2	9:00-11:00	Spatial Description, Position, Transformation
Mon, 21 st Oct	3	9:00-11:00	Manipulator Kinematics
Mon, 28 th Oct	4	9:00-11:00	Real-world application of robotics
	5		
Mon, 11 th Nov	6	9:00-11:00	Dynamics and localization of wheeled robot
Mon, 18 th Nov	7	9:00-11:00	Control systems design
Mon, 25 th Nov	8	9:00-11:00	Path planning
Mon, 2 nd Dec	9	9:00-11:00	Mapping and SLAM

Marking

Assessments:

- Bench Test, Online, 40% (6/12/2024)
- Coursework, 60% (deadline on 13/01/2025)