

# Junior Research Mentoring Programme

<b>Code:</b>	JRMP2021_21
<b>School / Department:</b>	Department of Mechanical Engineering
<b>Name of Research Leader:</b>	Dr David Navarro-Alarcon, Assistant Professor
<b>Research Topic:</b>	Design of Innovative Robotic Systems
<b>Short Description of the Research Project:</b>	This project aims at designing innovative robotic systems with the capability to solve/automate a real-life problem in the developing world. The student mentees will collaborate with postgraduate students in the Robotics and Machine Intelligence Lab to jointly propose and develop a feasible solution. The proposed solution should address at least one of the 17 goals for sustainable development defined by the UN (see <a href="https://www.un.org/sustainabledevelopment/for">https://www.un.org/sustainabledevelopment/for</a> details).
<b>No. of Places Offered:</b>	3
<b>Special Requirement(s):</b>	Preferred subjects taken: Physics and/or Mathematics and/or Computing

\* The information presented above is subject to change.

# Junior Research Mentoring Programme

<b>Code:</b>	JRMP2021_22
<b>School / Department:</b>	Department of Mechanical Engineering
<b>Name of Research Leader:</b>	Dr Henry Kar Hang Chu, Assistant Professor
<b>Research Topic:</b>	Intelligence Control of a Robot Arm
<b>Short Description of the Research Project:</b>	Robot arms are widely used in different sectors. In the past, robot arms were pre-programmed to perform simple and routine pick and place applications. With advancements in Artificial Intelligence, robot arms can perform these applications automatically with higher intelligence. In this project, students will have the opportunity to understand how a robot arm can pick up different unique objects based on camera images.
<b>No. of Places Offered:</b>	1
<b>Special Requirement(s):</b>	Interested in robotics, with basic computer (programming) knowledge

\* The information presented above is subject to change.