



JUNIOR RESEARCHER MENTORING PROGRAMME 2022

Code:	JRMP2022_13
School / Department:	Department of Electronic and Information Engineering
Name of Research Leader:	Dr Chen Wen, Associate Professor
Research Topic:	Looking around Corners Using Ghost
Short Description of the Research Project:	<p>Over the past decades, optics has been explored to solve many scientific problems in various applications, e.g. space exploration; robots; communications, imaging and unmanned aerial vehicles. Research on optics has significantly contributed to realizing academic, economic and societal impact. Looking around corners has always been considered an impossible or challenging task in optics because of the disordered scattering scrambles optical field from different paths.</p> <p>In this research project, ghost diffraction originating from quantum optics will be studied using single-pixel detectors, and the aim is to look around corners using ghost. Participating students will observe ghost transmission or imaging around corners, studying relevant phenomena and principles. This research project will demonstrate interesting phenomena and applications related to optics.</p>

No. of Places Offered:	2
Frequency of Meetings:	Monthly
Special Requirement(s):	Strongly interested in Information Technology; Physics, and Mathematics

** The information presented above is subject to change.*