

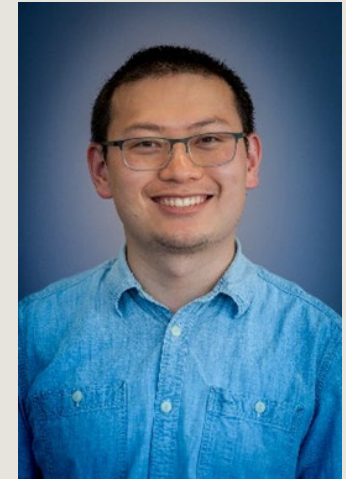
# MQ Photonics Research Centre seminars

**When:** Wednesday 3 March 2021 at 2 PM (Australia Sydney local time)

**Location:** MPR and via Zoom: Join from a PC, Mac, iPad, iPhone or Android device:  
Please click this URL to start or join: <https://macquarie.zoom.us/j/85829287435>  
Join from dial-in phone line: Dial: +61 2 8015 2088, Meeting ID: 858 2928 7435

**Title:** 3D meta-optics for information processing

**Abstract:** Optical technology plays a crucial role in our rapidly growing information-based society. I will provide an overview of recent advances in metasurfaces (ultrathin and ultralight optical devices), moving from fundamentals of metasurfaces to their applications for information processing. I will highlight our work on the design and fabrication of 3D meta-optics for advanced light manipulation. In particular, I will present the applications of using 3D metasurfaces for optical imaging, sensing, and holography.



***Dr Haoran Ren***

**Bio:** I gained my PhD in February 2017 at Swinburne University of Technology. From 2016 to 2018, I was a postdoc at RMIT University with the ARC Centre of Excellence CUDOS. In October-December 2018, I visited the National Centre for Scientific Research (CNRS) in France on a Victoria Fellowship. From 2019 to 2020, I held a Humboldt Research Fellowship at Ludwig Maximilian University of Munich, Germany. I returned to Australia in December 2020 and now hold a Macquarie University Research Fellowship.