

Dr. Yunbo Zhang

MSc	The Hong Kong University of Science and Technology Major: Mechanical Engineering GPA 4.0/4.0 Advisor: Prof. Kai Tang	Aug. 2018- Jun. 2019
BS	Nanjing University of Aeronautics and Astronautics , P. R. China Major: Aircraft Design and Engineering GPA 3.9/5.0 Rank 35/302	Sept. 2014- Jun. 2018

PROFESINAL EXPERIENCE

MR HMD

	Institute of Technology	Aug. 2019– May. 2023
Responsible for supporting and assisting Dr. Yunbo Zhang in various research activities and projects		
<ul style="list-style-type: none">- Set up the research laboratory with robot manipulators (Aubo, UFactory) and VR HMDs (Oculus Rift, Quest 1/2/3/pro).- Conducted research in human-robot interaction , smart manufacturing , and AR/VR development.		
Research Intern	OPPO US ResearchCenter (Innopeak Tech)	Jun. 2022– Sep. 2022
Research ofMixed Reality robot remote control system		
<ul style="list-style-type: none">- Designed and developed the innovative MR teleoperation system using an Automated Guided Vehicle (Rover Pro) .- Implemented the teleoperation system on Microsoft HoloLens 2 with real -		

Teaching Assistant

Materials Processing (ISEE-140)

Aug. 2021 – Dec. 2021

Guided undergraduates on a project with fabrication processes, including cutting, molding, casting, forming, milling, powder metallurgy, solid modeling, and engineering drawing.

SELECTED PUBLICATIONS

Chuhua Xian, Jun Zhang, Kun Qian, Wenhao Yang, and Yunbo Zhang. Depth Map Completion and Super-Resolution by Multi-Scale Progressive Fusion Strategy. *Journal of Intelligent Manufacturing*, 2024.

Yang, Wenhao, and Yunbo Zhang. "A Global Correction Method for Camera Registration in Video See-Through Augmented Reality Systems". *Journal of Computing and Information Science in Engineering*, 2023.

Yang, Wenhao

Engineered the development of a tele-robot control system that utilizes a Mixed Reality headset (HoloLens 2), to remotely control Automated Guided Vehicles (Rover Pro). The system features a user-friendly interface that offers three control methods: motion control, physical button control, and virtual button control.

A global calibration to solve the misregistration problems in the VST AR system Oct. 2021–Feb. 2023
Proposed a calibration method for the registration problem in a Video See-Through Augmented Reality (VSTAR) system. This study investigates 4 error sources and presents an efficient calibration procedure to reduce the misalignment accuracy via HMD-to-Camera transformation.

Augmented reality assisted smart factory management system development Dec. 2021–Feb. 2022
Developed an AR headset-based prototyping system to offer a clear and intuitive digital visualization, aiming to explore the potential applications in smart factories. This project presents a case study of a mai /TT1 1 ma (t)Tt (

Excellent Student Scholarship, 2019.

Outstanding Graduate in NUAA, 2018.

Straight-A Student, NUAA, 2014-2015, 2015~~2~~2016, 2016~~2~~2017 & 2017~~2~~2018.

Award of Pacemaker to Merit Student (Only one in each major), NUAA, 2014 -2015.

A-Level Scholarship (Only top 5% of students), NUAA, 2014-2015, 2015~~2~~2016 & 2017~~2~~2018.

National Encouragement Scholarship, 2014~~2~~2015.

Outstanding Student Cadre in NUAA, 2015- 2016.

'SANHE CUP' National Network Contest for Helicopter, First Prize, 2016.