

Hongwei CUI

✉ willing.cui@outlook.com

☎ +852 5635 1482


🌐 willing.website

Hong Kong, China



EDUCATION

- **Ph.D. Information Engineering**
The Chinese University of Hong Kong (QS #36)
Supervised by Prof. Soung Chang Liew
2021 - Present

 **Interested Research Area:**
 - Optical wireless communication
 - LLM-based AI agents
 - IoT systems
 - AI-powered wireless communication
- **B.S. Electronic Information Engineering**
Shandong University
CGPA: 4.625/5.0 (Ranking 1st in Chongxin College)
2017 - 2021

AWARDS & RECOGNITION

- **First Prize of Taishan Student Scholarship**
Tai Shan Students Foundation
2024
- **Outstanding Undergraduate Dissertation**
Shandong University
2021

SKILLS

- **Research and Development Abilities**
 - Analog/digital circuit design and simulation
 - PCB layout
 - IoT and embedded system development
 - 3D modeling and rendering
 - Web front-end development
 - Mobile application (React) development
 - Game engine development
 - Optical simulation
- **Programming Languages/Frameworks**
C, C++, Python, Pytorch, HTML5, JavaScript, Verilog, Java

RESEARCH WORKS

- **Intelligent Reconfigurable Optical Wireless Ether**
Hongwei Cui, Soung Chang Liew
arXiv (Preprint)
2025/2/10
- **Wi-LiFi: Integrated Optical Wi-Fi for Enhanced Mobile Robotic Communications and Localization**
Hongwei Cui, Soung Chang Liew, He Chen
IEEE Transactions on Vehicular Technology
2024/12/13
- **LLMind: Orchestrating AI and IoT with LLM for Complex Task Execution**
Hongwei Cui, Yuyang Du, Qun Yang, Yulin Shao, Soung Chang Liew
IEEE Communications Magazine
2024/9/27
- **Wi-LiFi: Integrated Optical Wi-Fi for Enhanced Mobile Robotic Communications**
Hongwei Cui, Soung Chang Liew, He Chen
IEEE International Conference on Communications
2024/6/9

PATENT

- 一种Wi-Fi信道检测系统及方法 (A Wi-Fi Channel Detection System and Method)
崔洪玮 (Hongwei Cui)
Patent Number: ZL2022101481253
2022/5/6

HOBBIES & INTERESTS



Electronic
Circuit



AI & LLM



UI & UX



Photography