

# FANYI MENG

✉ fanyimeng@link.cuhk.edu.cn · ☎ (+86) 18935106029 · 🌐 fanyimeng0

## 🎓 EDUCATION

**The Chinese University of Hong Kong(Shenzhen) (CUHKSZ)** 2023 – Present

*M.phil student* in Computer and Information Engineering (CIE) , expected March 2025

**Southern University of Science and Technology (SUSTech)** 2019 – 2023

*B.S.* in Electrical and Electronic Engineering (EEE) , Communication Engineering

- GPA : **3.47 / 4** (85 / 100)

## 👤 EXPERIENCE

**Southern University of Science and Technology** Oct.2020 – Feb.2023

*Undergrad Research Assistant* Supervisor: Rui Wang

Project with **HONOR**

- Applied **Reinforcement Learning** to optimize the Age of Information (AoI) in an IoT system,
- Utilized **MATLAB's WLAN Toolbox** for simulation of the Distributed Coordination Function (DCF) within the Wi-Fi MAC layer.
- Utilized **NS-3** to analyze the Enhanced Distributed Channel Access (EDCA) mechanism in 802.11ac, focusing on throughput and latency.
- Refined EDCA parameters to improve overall QoS performance in Channel Allocation for WiFi networks.

**Shenzhen Research Institute of Big Data** Mar.2023 – Present

*Research Assistant* Supervisor: Guangxu Zhu

**DIIS** Laboratory Internal Project

- Extracted **Channel State Information (CSI)** from Wi-Fi signals using Intel 5300 and RT-AC86U.
- Established a data collection platform for fall and intrusion detection.
- Employed three Intel 5300 for sub-2-second latency in real-time human **tracking and localization**.
- (Ongoing) Enhancing algorithm accuracy by jointly using Angle of Arrival (AOA) and Direction Finding/Time of Flight (DFS/TOF).

Project with **China Mobile**

- (Ongoing) Utilizing Sionna for simulating coverage maps.
- (Ongoing) Optimizing UAV coverage based on real-world data.

## ⚙️ SKILLS

- Programming Languages: Python > MATLAB > C++ > Labview = Java
- Platform: Linux
- Tools: Sionna, NS-3, CARLA, ROS

## ♡ HONORS AND AWARDS

*3<sup>rd</sup> Prize*, the First Wi-Fi Sensing Contest

Dec. 2023

Advanced to the semifinals in International Algorithm Competition of Pazhou Lab

Nov 2015

## 📄 MISCELLANEOUS

- Website: <http://fanyimeng0.github.io>
- GitHub: <https://github.com/fanyimeng0>
- Languages: English - TOFEL 92, Mandarin - Native speaker