Intelligent Wireless Communication (i-WiC) Laboratory

Lab Director

Dr. Keshav Singh

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i-WiC Lab

NSYSU iCOMM. ENG. 通訊工程研究所 Institute of Communications Engineering

國立中山大學工學院 COLLEGE OF ENGINEERING, NSYSU

國立中山大學 National Sun Yat-sen University

About the LAB

- Est. March, 2020.
- More than 150 publications in IEEE Journals and Conferences.
- More than 10 International Collaboration with Academia and Industry.
- 5 ongoing academic and Industry projects.
- Currently 10 members including Postdocs, PhD and MS students.

Lab Members

-WiC Lab

Director

Dr. Keshav Singh

Post Docs

1. Dr. Anal Paul
2. Dr. Soumen Mondal
3. Dr. Abhinav Singh Parihar

PhD Scholars

1. Mr. Rojith K
2. Mr. Arnav Mukhopadhyay

MS Students

1. Sandeep Singh
2. Ani Rosyidah
3. Hasriyasni Mandalika H.
4. Nonis Wara
5. Riftia Aulal Mufti

Awards/Achievement

Ms. Bishmita Hazarika

➢ **Best Paper award** in *2024 IEEE Int. Workshop Comput.-Aided Model. Des. Commun. Links Netw.* & *Int. Conf. Ind. Netw. Intell. Syst.*

Ms. Sonia Pala

➢ **Best PhD Thesis award** by *IEEE Tainan Section*

Doctoral Students Commendable Research Performance Award

➢ *Sravani Kurma* in *2024*
➢ *Bishmita Hazarika* in *2023*

Certificate of Excellence in *All-Topic Competition and Exhibition* from *Institute of Communication Engineering, NSYSU*

➢ *Awarded in the years 2024, 2023, 2022*

● *Research Achievements*
● **9 research articles** accepted in **IEEE-GLOBECOM-2024**
● **9 research articles** accepted in **ICC-2024**
● **12 research articles** accepted in **IEEE-GLOBECOM-2023**
● **5 research articles** accepted in **ICC-2023**

Internationals-Collaborations

1. Prof. Zhiguo Ding, University of Manchester, UK

2. Prof. Bruno Clerckx, Imperial College London, UK

3. Prof. Mark Flanagan, University College Dublin (UCD), Ireland

4. Prof. Mohamed-Slim Alouini, King Abdullah University of Science and Technology (KAUST), Kingdom of Saudi Arabia

5. Dr. Sudip Biswas, Indian Institute of Information Technology, Guwahati, India

6. Dr. Ankur Bansal, Indian Institute of Technology Jammu, India

7. Dr. Faheem Khan, University of Huddersfield, UK

8. Prof. Shahid Mumtaz, Instituto de Telecomunicações, Santiago University Campus, Portugal

9. Dr. Omid Taghizadeh, 5G Wireless Research Group, Lenovo Deutschland GmbH, Germany.

10. Prof. Anke Schmeink, RWTH Aachen, Germany

11. Prof. Cunhua Pan, Southeast University, China.

12. Prof. Theodoros Tsiftsis, School of Intelligence Science and Engineering, Jinan University, Zhuhai, China.

Major Research Areas

Next generation multiple access

- Non-orthogonal multiple access (NOMA)
- Rate splitting multiple access (RSMA)
- Partial NOMA

Next generation Wireless Networks

- 5G Advanced and 6G Communications
- Internet of Vehicles (IOV)
- Vehicles to Everything (V2X)
- Ultra Reliable and Low Latency Communication(URLLC)
- Integrated Sensing and Communication (ISAC)

Advance Technologies

- UAV assisted wireless communication
- Full duplex Networks
- Reconfigurable Intelligent surfaces (RIS)
- Backscatter communication
- AI and Machine learning for wireless communications
- Digital Twin and Metaverse

Why i-WiC?

- World Class Laboratory with 24 X 7 access
- High Performance Equipment's
- Be a part of team working in the latest technological advancements in next generation wireless networks.
- Collaboration with key researchers in the field of wireless communication
- Financial aid to present your work in Tier-1 conferences in the filed of wireless communication
- Respectable monthly financial support
- Publication awards

THANK YOU