

Intelligent Wireless Communication (i-WiC) Laboratory

Lab Director

Dr. Keshav Singh

Assistant Professor

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Web:- <https://www2.nsysu.edu.tw/i-WiC/>



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 14 members including Postdocs, PhD and MS students.

Lab Members



Director

Dr. Keshav Singh

Post Docs

1. Dr. Sandeep Kumar Singh
2. Dr. Mayur Katwe
3. Dr. Anal Paul

PhD Scholars

1. Mr. Allu Raviteja
2. Ms. Bishmita Hazarika
3. Ms. Prajwalita Saikia
4. Ms. Kurma Sravani
5. Ms. Pala Sonia
6. Mr. Arnav Mukhopadhyay

MS Students

1. Mr. Farjam Karim
2. Mr. Jetti Yaswanth
3. Mr. Vaibhav Sharma
4. Ms. Vatsala Sharma
5. Mrs. Rasika Deshpande
6. Ms. Tri Ayu Lestari
7. Mr. Jibril Mead

- **Dr. Prasanna Raut** (*Post. Doc.*)
(*present.*) Senior Researcher at TII, UAE.
- **Dr. Neelima Agrawal** (*Post. Doc.*)
- **Mr. Hasan Albinsaid** (*MS Student*)
(*present.*) PhD Student,
Electrical and Computer Engineering (ECE),
King Abdullah University of Science and Technology (KAUST),
Thuwal, Saudi Arabia.
- **Mr. Ahmad Fauzi Makarim** (*MS Student*)
(*present.*) Wireless Engineer at Huawei
- **Mr. Anas Machfudy Al Junaedi** (*MS Student*)
(*present.*) BFLP IT Trainee at Bank Raya Indonesia

Awards/Achievement



Dr. Keshav Singh

- **NSYSU University's Paper Award-2021, 2022**
- **Best Teaching Award in Digital Communications-Spring-2022**



Ms. Bishmita Hazarika and Ms. Prajwalita Saikia (PhD students)

➤ **3rd prize** in College of Engineering, NSYSU,
2022 All-topic Competition and Exhibition.



- **12 research articles** accepted in **IEEE-GLOBECOM-2023**
- **5 research articles** accepted in **ICC-2023**
- **5 research articles** accepted in **IEEE-GLOBECOM-2022**
- **4 research articles** accepted in **IEEE-MILCOM-2022**
- **3 research articles** accepted in **IEEE-WCNC-2023**



- **Jetti Yaswanth** (MS student) has been offered a position of **Radar Algorithm Developer** in Whetron Electronics Co. Limited, Taiwan.
- **Farjam Karim** (MS student) has been offered a six month internship (**Automation Engineer**) in SHL Medicals Services, Taiwan.

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



i-WiC Lab-At a Glance



