### SANDEEP KUMAR SINGH

Assistant Professor, Electronics & Communication Engineering Indian Institute of Technology Roorkee, India

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Website | Google Scholar | GitHub | LinkedIn

### **EDUCATION**

Ph.D. in Computer and Network Engineering, TU Braunschweig, Braunschweig, Germany [Grade: Summa Cum Laude]	03/2014-06/2019
M.S. in Electrical Engineering, Indian Institute of Technology Madras, Chennai, India [Grade: 8.9/10]	07/2010-06/2014
B.Tech. in Electronics & Communication Engineering, SASTRA University, Thanjavur, India [Grade: 8.35/10]	07/2006–06/2010

### **WORK EXPERIENCE**

Visiting Assistant Professor, Electrical Engineering, Eindhoven University of Technology, Eindhoven, the Netherlands	07.2025–Present
Assistant Professor, Electronics and Communication Engineering, Indian Institute of Technology Roorkee, Roorkee, India	06/2023–Present
Postdoctoral Scholar, University of California, Davis, USA	06/2021-05/2023
Research Scientist, German Aerospace Center (DLR), Neustrelitz, Germany	07/2019-06/2021
Research Staff, Technical University of Braunschweig, Braunschweig, Germany	03/2014-06/2019

### **TEACHING EXPERIENCE**

## **Primary Instructor**

- ECL-503 Terahertz communication Systems, IIT Roorkee, Spring 2025 & Spring 2024
- ECC-507: Essential Concepts in Terahertz Communication, IIT Roorkee, Spring 2024
- IPQ-301: A Primer in Terahertz Technology, IIT Roorkee, Fall 2024
- ECC-391: Technical Communication, IIT Roorkee, Spring 2024.
- ECN-502: Terahertz communication and sensing lab-II, IIT Roorkee, Spring 2024

- ECN-509: Terahertz communication and sensing lab-I, IIT Roorkee, Fall 2023
- ECN-510: Communication Lab, IIT Roorkee, Fall 2023

#### Co-Instructor

- EEC 239B: High-capacity optical data systems and networks, UC Davis, Fall 2022
- IT Technology for Social Good, TU Braunschweig, Spring 2018

## **Teaching Assistant**

- Broadband Communication, Advance Topics in Telecommunication, Internet Lab—TU BS
- Optical Networks, Digital Design—IIT Madras, India

#### **SPONSORED PROJECTS**

Projects: <a href="https://sites.google.com/view/sandeepks/projects">https://sites.google.com/view/sandeepks/projects</a>

### **SUPERVISION**

2 Ph.D., 3 M. Tech., and 11 B. Tech students in optical and quantum networking, resource allocation, network security, AI/ML in communication networks

#### **AWARDS & HONORS**

New Faculty Fellowship (IIT Roorkee)	2023-2025
Travel Grant (Optica, USA)	2023
Reviewer Recognition (Optica, USA)	2019, 2020
Subsea Fiber School Selection (Google, Finland)	2019, 2020
Cloud & Edge Workshop (SixSq, Switzerland)	2018
Best Paper Award in Track (MIPRO, Croatia)	2016
DAAD Fellowship (Germany)	2011–2012

## **SELECTED PUBLICATIONS**

# Full list of publications: <a href="here">here</a>

Quantum Wrapper Networking, IEEE Communications Magazine	2024
Entangled Packet Switching Journal of Lightwave Technology	2024