

Dr. Priyank Sharma

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Dept of Electronics and Communication Engineering
Central University of Jammu,
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EDUCATION:

Ph.D [Electronics and Communication Engineering]
Indian Institute of Information Technology, Jabalpur, India (Institute for National Importance)
Year: 2016- 2022
Broad area of research: Wireless Communications
Topic: Non-orthogonal Multiple Access system
Obtained marks (In percentage): 89

M.Tech [Electronics and Communication Engineering]
Madhav Institute of Technology, Gwalior, India
Year: 2010- 2012
Broad area of research: Microwave Engineering
Topic: Microstrip Leaky Wave Antenna
Obtained marks (In percentage): 73.10

B.E [Electronics and Communication Engineering]- 2009

HSSE [Mathematics] - Year: 2003

HSCE- Year: 2001

SHORT TERM COURSE:

PYTHON/MATLAB and NYUSIM for Machine Learning (ML) in 5G mmWave MIMO Technology
Indian Institute of Technology, Kanpur
Topics: MIMO, OFDM, mmWave, Channel estimation, ML, etc.
Duration: 20 days, October, 2021
Organized By: Prof. Aditya K. Jagannatham

TECHNICAL SKILLS:

- **Programming** : C, C++, MATLAB, Python, HTML, GIT, Command line, 8085.
- **Platforms** : Linux, Windows 2000, XP, Vista, Ubuntu Servers.
- **Tools** : Spyder, NYUSIM, LabView, CST, LaTeX.

FIELD OF RESEARCH:

- NOMA scheme for 5G, OMA scheme, Generalized Fading Channels, Diversity Combining techniques.
- Performance Parameters: Outage probability, Sum-rate.
- Research Interest: 5G and beyond techniques, Cooperative Communications, Energy Harvesting, TAS, MIMO, IoT, AI/ML, mmWave.

AWARDS:

- **MHRD Research Fellowship**, PDPM-Indian Institute of Information Technology, Jabalpur
- **MHRD Research Fellowship**, Madhav Institute of Technology, Gwalior
- **Reviewer** for Journals: IET communications, IEEE Access, Elsevier and Several International Conferences.

COMPARATIVE EXAMS:

- **GATE Qualified in years:** 2023, 2020, 2019, 2016, 2011, 2010, and 2009.
- **UGC-NET:** Dec 2014 and June 2014.

LIST OF PUBLICATIONS:

TOTAL PUBLISHED PUBLICATIONS: 11 SCI: 06 NON-SCI: 03 CONFERENCE: 02

UNDER REVIEW:

1. **Priyank Sharma** and Atul Kumar, Performance analysis of P-N-NOMA over κ - μ fading channel, Wireless Personal Communications, Springer (Index: SCI; I.F.:1.2).
2. Mr srinivasarao k, **Priyank Sharma**, M. Surendar, Outage and Sum-Rate Analysis of IRS-NOMA System over η - μ Fading Channel, Computers and Electrical Engineering, Elsevier (Under-review).
3. K. Srinivasarao, **priyank sharma** and M. Surendar. "Outage Analysis for User Selection Based Downlink Cooperative NOMA system with TAS techniques over $\eta - \mu$ Fading Channel." Physical Communication –Elsevier (Submitted Major revision) (Index: SCI; I.F: 2.37; SJR: Q2).
4. K. Srinivasarao, **priyank sharma** and M. Surendar. "Performance Analysis of Downlink IRS-NOMA system" International Journal of Communication Systems – 2.04 (Under Review) (Index: SCI; I.F: 4.152; SJR: Q1)

PUBLISHED:

1. **P. Sharma**, A. Kumar, and M. Bansal, "Performance analysis of downlink NOMA system with diversity combining schemes over η - μ fading channel" Physical Communication, vol. 47, 2021, pp-522-531, doi: 10.1016/j.phycom.2021.101383 (Index: SCI; I.F.: 2.4).
2. **P. Sharma**, A. Kumar, M. Bansal, "Performance analysis for user selection-based downlink non-orthogonal multiple access system over generalized fading channels" Transactions on Emerging Telecommunications Technologies, vol. 32, 2021;e4347. <https://doi.org/10.1002/ett> (Index: SCI; I.F.: 3.41).
3. **P. Sharma**, A. Kumar and M. Bansal, "Performance analysis of downlink NOMA over η - μ and κ - μ fading channels," in IET Communications, vol. 14, no. 3, pp. 522-531, 18 2 2020, doi: 10.1049/iet-com.2019.0413 (Index: SCI; I.F.: 1.3).
4. **P. Sharma**, A. Kumar and M. Bansal, "Performance Analysis of P-N-NOMA Over Generalized Fading Channel," in IEEE Access, vol. 8, pp. 105962-105971, 2020, doi: 10.1109/ACCESS.2020.3000260 (Index: SCI; I.F.: 3.4).
5. K. Srinivasarao, **Priyank Sharma**, M. Surendar, "Outage analysis for user selection based downlink cooperative NOMA network over generalized fading channels" Digital Signal Processing, Volume 132, 2022, ISSN 1051-2004, <https://doi.org/10.1016/j.dsp.2022.103801>, (Index: SCI; I.F: 3.381; SJR: Q2).
6. Srinivasarao, K., **Sharma, P.** & Surendar, M. Outage analysis for user pairing based downlink C-NOMA network with receiver diversity techniques over η - μ fading channel. *Sāadhanā* 48, 218 (2023). <https://doi.org/10.1007/s12046-023-02290-1>

7. **P. Sharma**, A. Kumar and M. Bansal, "On Performance of Downlink NOMA with Equal Gain Combining over κ - μ Fading Channel for limiting value of κ ," 2020 IEEE 4th Conference on Information & Communication Technology (CICT), Chennai, India, 2020, pp. 1-6, doi: 10.1109/CICT51604.2020.9312096, Date: 3-5 December 2020, Place: IIITDM Kancheepuram, Chennai, India (Index: Scopus).
8. **P. Sharma**, A. Kumar and M. Bansal, "Performance Analysis of Downlink NOMA System with Diversity Combining Schemes over κ - μ Fading Channel" 2022 IEEE 5th Conference on Information & Communication Technology (CICT), Gwalior, India, 2022, pp. 1-5, doi: 10.1109/CICT56698.2022.9997916, Date: 18-20 November 2022, Place: AVB-IIITM Gwalior, India (Index: Scopus).
9. **P. Sharma** " Leaky Wave Antenna with Monopole Antenna " published, International Journal of Research in Antenna and Microwave Engineering – IJRAWE, Vol 02, Issue 01; Jan-Feb 2013.
10. **P. Sharma** "Microtrip Leaky Wave Antenna with Reduce Ground Plane " published in Journal of Communication Engineering & System, Volume 2, Issue 3, December 2012.
11. **P. Sharma** "Ergodic Sum-Rate Analysis of two user-NOMA System over Generalized Fading Channels" published in Engineering and Technology Journal for Research and Innovation (ETJRI) ISSN 2581-8678, Volume IV, Issue II, Jun 2022.

WORKSHOP/FDP:

S.NO.	TOPIC	DATE	CONDUCTED BY
1.	Recent advances in 5G communication systems	March 13-17, 2020	PDPM-IIITDM JABALPUR
2.	5G communications	June 11-15, 2018	PDPM-IIITDM JABALPUR
3.	5G and beyond wireless networks	January 5, 2018	IIT Indore
4.	Network simulations and tools	February 4-9, 2017	PDPM-IIITDM JABALPUR

PROFESSIONAL EXPERIENCE:

- Organization** : IIIT, Pune **Sept 2022 – July 2023**
Title : Assistant Professor (Contract)
Responsibilities: Teaching, Research

- Organization** : Amity University, Gwalior **March 2022 – Sept2022**
Title : Assistant Professor
Responsibilities: Teaching, Research

- Organization** : The GATE ACADEMY, Bangalore **August 2014 – July 2016**
Title : Visting Faculty
Responsibilities: Teaching GATE subjects

- Organization** : ITM, GOI, MP, India **July 2013 – July 2014**
Title : Assistant Professor
Responsibilities: Teaching and Project

REFERENCES:

1. **Dr. Atul Kumar**
 Assistant Professor, Department of Electronics and Communication Engineering
 PDPM-Indian Institute of Information Technology design and manufacturing, Jabalpur – 482 005,
 MP, India

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2. **Dr. Matadeen Bansal**

Assistant Professor, Department of Electronics and Communication Engineering
PDPM-Indian Institute of Information Technology design and manufacturing, Jabalpur – 482 005,
MP. India

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3. **Dr. Ravi Panwar**

Assistant Professor, Department of Electronics and Communication Engineering
PDPM-Indian Institute of Information Technology design and manufacturing, Jabalpur – 482 005,
MP. India

Phone: 0761-2794477

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EXTRA CURRICULAR ACTIVITIES:

WEB DESIGN Designing web pages using popular technologies: HTML, CSS

SOCIAL WORK Participated in National Social at School and College

HOBBIES Reading, Writing stories / lyrics in hindi, Watching movies, Mathemagics
