Dr. Komal Janghel
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PhD (IIT Delhi)

Department of Electronics & Communication Engineering

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Joined the Institute in July 2018

About

Hello, welcome to my home page. I am an Assistant Professor in the Department of Electronics and Communication at Indian Institute of Information Technology, Guwahati. I have joined IIITG in July 2018. I received the PhD degree in Wireless Communication from the Department of Electrical Engineering, IIT Delhi in 2018. My PhD research mainly focused on the performance analysis of underlay cognitive radio with energy harvesting secondary networks. Before that, I did my Masters in Signal Processing from Indian Institute of Technology Guwahati in 2009. From July 2009-June 2010, I have worked as an Assistant Professor at Lovely Professional University, Jalandhar, India. From July 2010-December 2010, I have worked as an Assistant Professor at National Institute of Technology (NIT) Jalandhar, India. I have served as a research engineer at National Brain Research Center, Manesar, India for the period January 2011-June 2011. From July 2011-December 2012, I have worked as an Assistant Professor at Jaypee University of Information Technology Waknaghat, India.

Research Interests

Underlay cognitive radio networks, energy harvesting in the cognitive radio network and cooperative network, non-orthogonal multiple access, physical layer security.

Teaching

At IIITG, currnetly I am teaching the following courses:

Digital Communication (U.G.)

Digital Communication Lab (U.G.)

Publication

Journal

- K. Janghel and S. Prakriya, "Throughput of Underlay Cognitive Energy Harvesting Relay Networks With an Improved Time-Switching Protocol", in IEEE Transactions on Cognitive Communications and Networking,vol. 4, no. 1, (2018), pages. 66-81,
- K. Janghel and S. Prakriya, "Performance of Adaptive OMA/Cooperative-NOMA Scheme with User Selection", in IEEE Communications Letters, (2018),
- K. Janghel and S. Prakriya, "Performance of Secondary Network With Primary Beamforming-Assisted Energy Harvesting Transmitters", in IEEE Transactions on Vehicular Technology,vol. 66, no. 10, (2017), pages. 8895-8909,,

Conference

- K. Janghel and S. Prakriya, "Performance of DF incremental relaying with energy harvesting relays in underlay CRNs", to appear in Proc. 20th International Symposium Wireless Personal Multimedia Communication (WPMC),99, (2017), pages. 1-6,
- K. Janghel and S. Prakriya, "Throughput performance of an energy-efficient protocol for two-hop cognitive networks with energy harvesting relays", Signal Processing Advances in Wireless Communications (SPAWC), (2016),
- K. Janghel and S. Prakriya, "Outage performance of dynamic spectrum access systems with energy harvesting transmitters", Personal, Indoor, and Mobile Radio Communication (PIMRC), (2014),