

List of Publications

Journals

1. Ugrasen Singh, Manav R. Bhatnagar, and Theodoros A. Tsiftsis, "Feedback-Based SSK modulation: constellation design and performance results," *IEEE Transactions on Communications*, vol. 68, no. 11, pp. 6902-6917, Nov. 2020.
2. Ugrasen Singh, Manav R. Bhatnagar, and Theodoros A. Tsiftsis, "Secrecy analysis of SSK modulation: adaptive antenna mapping and performance results," *IEEE Transactions on Wireless Communications*, vol. 20, no. 7, pp. 4614-4630, Jul. 2021.
3. Ugrasen Singh and Manav R. Bhatnagar, "Secrecy analysis for spatial modulation: transmission scheme and performance evaluation" *IEEE Communication Letter*, vol. 26, no. 1, pp. 35-39, Jan. 2022.
4. Ugrasen Singh, Manav R. Bhatnagar, and Jamel Nebhen, "Quadrature spatial modulation-assisted full-duplex communication," *IEEE Wireless Communication Letter*, vol. 10, no. 12, pp. 2629-2633, Dec. 2021.
5. Ugrasen Singh, Manav R. Bhatnagar, and Ankur Bansal, "RIS-assisted SSK modulation: reflection phase modulation and performance analysis," *IEEE Communication Letter*, vol. 26, no. 5, pp. 1012--1016, May. 2022.
6. Ugrasen Singh, Hanan Al-tous, Olav tirkkonen, and Manav R. Bhatnagar, "Performance analysis of the STAR-RIS-assisted downlink NOMA communication system with MRC" *IEEE Communication Letter*, vol. 27, no. 7, pp. 1739-1743, May. 2023.
7. Ugrasen Singh and O. Tirkkonen, "Robust link-adaptation in multiantenna URLLC systems with flashlight interference," *IEEE Communication Letter*, August 2024.

Conferences

1. Ugrasen Singh and Manav R. Bhatnagar, "Partially informed transmitter-based space shift keying," in *Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Istanbul, Turkey, 9 Sep. 2019, pp. 1--7.
2. Ugrasen Singh and Manav R. Bhatnagar, "Secrecy performance analysis of adaptive SSK transmission," in *Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, London, U.K (Virtual Conference), 31 Aug. 2020, pp. 1-7.
3. Ugrasen Singh and Manav R. Bhatnagar, "An information transmission scheme for RIS-aided wireless communication network," published in *Proc. IEEE International Conference on Signal Processing and Communications (SPCOM)*, Bangalore, India, 13 July 2022.
4. Devendra Gurjar, Ugrasen Singh, and Prabhat Kumar Upadhyay, "Energy harvesting in hybrid two-way relaying with direct link under Nakagami- m fading," in *Proc. IEEE*

Wireless Communications and Networking Conference (WCNC), Barcelona, Spain, 16 April. 2018, pp. 1-6.

5. Ugrasen Singh, Sourabh Solanki, Devendra Gurjar, Prabhat Kumar Upadhyay, and Daniel Benevides da Costa, “Wireless power transfer in two-way AF relaying with maximal-ratio combining under Nakagami- m fading,” in Proc. IEEE International Wireless Communications & Mobile Computing Conference (*IWCMC*), Cyprus, 25 Jun. 2018, pp. 169—173.
6. Ashvin Srinivasan, Ugrasen Singh and Olav Tirkkonen, “Multi-agent reinforcement learning approach scheduling for in-X subnetworks,” in Proc. IEEE VTC, Washington DC, USA, Oct. 2024.
7. Ugrasen Singh and Olav Tirkkonen, “Link-Adaptation for downlink MIMO URLLC systems,” published in IEEE WCNC, Dubai, UAE, 2024.
8. Ugrasen Singh, Harsh Raj and Manoj BR, “Performance analysis of IRS-Assisted SSK with reflection phase modulation over Rician fading,” in Proc. IEEE VTC, Singapore, Jun. 2024.