Dr Sanjeeb Shrestha

Research Publications

Journal Papers (Published and ongoing)

- **S. Shrestha**, X. Kong, P. Kwan and X. Huang, "An Adaptive Approach in Channel Quantization for Small Cells Based on Per-Receiver Antenna Quantization," in *IEEE Access*, vol. 13, pp. 107010-107021, 2025, doi: 10.1109/ACCESS.2025.3580698.

- **S. Shrestha**, X. Kong, and P. Kwan, "On the quantitative analysis of assessment scores with implicit and explicit constraints," Studies in Educational Evaluation, vol. 87, p. 101509, Aug. 2025, doi: https://doi.org/10.1016/j.stueduc.2025.101509.

- O. Alnasser, J. Al Muhtadi, K. Saleem, and **S. Shrestha**, "Signature and anomaly based intrusion detection system for secure IoTs and V2G communication," Alexandria Engineering Journal, vol. 125, pp. 424–440, Apr. 2025, https://doi.org/10.1016/j.aej.2025.03.068.

- **S. Shrestha**, X. Huang, K. Saleem, Savitri Bevinakoppa, and T. Jan, "Quantification of Interference Constraint for Small Cells in Low SINR Regime with Steepest Ascent Method," IEEE Access, pp. 1–1, Jan. 2024, doi: https://doi.org/10.1109/access.2024.3524671.

- **S. Shrestha**, "Addressing the hidden terminal problem in MU-MIMO WLANs with relaxed zero-forcing approach," Uts.edu.au, 2017, doi: http://hdl.handle.net/10453/116766.

- **S. Shrestha**, G. Fang, E. Dutkiewicz, and X. Huang, “Solving hidden terminal problem in MU-MIMO WLANs with fairness and throughput-aware precoding and a degrees-of-freedom-based MAC design,” EURASIP Journal on Wireless Communications and Networking, vol. 2016, no. 1, Apr. 2016, doi: https://doi.org/10.1186/s13638-016-0611-7.

- A. Liu, X. Kong, **S. Shrestha**, and P. Kwan. “An IMU-Assisted Approach for UWB NLOS Error Modelling in Indoor Positioning” (to be submitted).

Conference Papers

- **S. Shrestha**, B. Bhandari and S. Bevinakoppa, "Distributive Quantization Codes for Finite Rate Feedback-Based Small Cells," *2025 IEEE 22nd Consumer Communications & Networking Conference (CCNC)*, Las Vegas, NV, USA, 2025, pp. 1-6, doi: 10.1109/CCNC54725.2025.10976069.

- **S. Shrestha**, X. Kong, K. Saleem, B. Bhandari and A. Jumaily, “Artificial Intelligence (AI)-based Water Safety (AWS) – A Conceptual Framework”, 14th ICAEIC-2025, Sydney, 2025.

- B. Siku and **S. Shrestha**, “Airtime-based Dynamic Unlicensed Spectrum Allocation Between Wi-Fi 6 and LTE/5G”, 14th ICAEIC-2025, Sydney, 2025.

- A. Liu, X. Kong, and **S. Shrestha**, “Development of UWB NLOS Model Aided by IMU in Indoor Positioning Systems,” pp. 147–152, Nov. 2024, doi: https://doi.org/10.1109/fmlds63805.2024.00037.

- **S. Shrestha**, G. Fang, E. Dutkiewicz and X. Huang, “Effect of CSI quantization on the average rate in MU-MIMO WLANs.” In 2016 13th IEEE Annual Consumer Communications & Networking Conference (CCNC), pp. 824- 828. IEEE, 2016.

- **S. Shrestha**, G. Fang, E. Dutkiewicz, and X. Huang, "Medium Access Control Protocol to Address Hidden Terminals in MU-MIMO WLANs." In Computer and Information Technology; Ubiquitous Computing and Communications; Dependable, Autonomic and Secure Computing; Pervasive Intelligence and Computing (CIT/IUCC/DASC/PICOM), 2015 IEEE International Conference on, pp. 1638-1645. IEEE, 2015.

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- **S. Shrestha**, G. Fang, E. Dutkiewicz and X. Huang. "Addressing hidden terminals in wlans with zero forcing coordinated beamforming." In Communications and Information Technologies (ISCIT), 2014 14th International Symposium on, pp. 249-253. IEEE, 2014.

- **S. Shrestha**, Z. Dou and Z. Khan. "Performance analysis of spatial multiplexing MIMO system with time reversal technology." Proc. SPIE 8768, International Conference on Graphic and Image Processing (ICGIP 2012), http://dx.doi.org/10.1117/12.2010533.

- **S. Shrestha**, and D. Zheng, "MIMO channel capacity and its impact on BER with CSI influence." In Millimeter Waves (GSMM), 2012 5th Global Symposium on pp. 498-502. IEEE, 2012.

- O. Gordon, D. Zhen, A.P. Morales, and **S. Shrestha**. "Inter-link multiuser MIMO channel capacity and the effects of clusters." In Communication Software and Networks (ICCSN), 2011 IEEE 3rd International Conference on pp. 16-20. IEEE, 2011.