

# Dr. Muhammad Asim

## Publications

### International Journal Publications/Project Reports

1. Muhammad Asim, *A Study of Pragmatic Indoor Positioning Systems and Techniques*, Technical Report, Start-up Research Grant Project, Higher Education Commission, Islamabad, Pakistan (manuscript in preparation).
2. Muhammad Asim, Karamat Ullah Khan, Asfandyar Khan, Abdullah Khan, *WiFi based Indoor Positioning System based on 3D Trilateration approach*, (manuscript in preparation).
3. Muhammad Asim, Asfandyar Khan, Javed Iqbal Bangash, Abdullah Khan, *Channel-Aware Receiver for Phase Noise Channel*, submitted in June 2020 to Journal of Central South University - Springer.
4. Abdullah Khan, Haruna Chiroma, Muhammad Imran, Asfandyar Khan, Javed Iqbal Bangash, Muhammad Asim, Mukhtar F. Hamza, Hanan Aljuaid, *Forecasting electricity consumption based on machine learning to improve performance: A case study for the organization of petroleum exporting countries (OPEC)*, in Computers Electrical Engineering, Volume 86, July 2020, pages-
5. M. Martalo, G. Ferrari, M. Asim, J. Gambini, C. Mazzucco, G. Cannalire, S. Bianchi, R. Raheli, *Iterative Synchronization for Dually-Polarized Independent Transmission Streams*," in IEEE Transactions on Communications, Volume 65, Issue 6, June 2017, pages: 2534 - 2542.
6. M. Martalo, G. Ferrari, M. Asim, J. Gambini, C. Mazzucco, G. Cannalire, S. Bianchi, R. Raheli, *Pragmatic phase noise compensation for high-order coded modulations*," in IET Communications, Volume 10, no. 15, October 2016 pages: 1956-1963.
7. M. Asim, G.S. Choi, *An Optimized Framework for Degree Distribution in the LT codes based on Power Law*, in Journal of Central South University - Springer, Volume 20, Issue 10, Oct 2013, pages: 2693- 2699.
8. M. Asim, G.S. Choi, *Evaluation of Achievable Rate for Concatenated Fountain Codes in Wireless Channels*, in Korea Society of Digital Industry & Information Management, Volume 8, Mar 2012, pages: 147-155.
9. M. Martalo, M. Asim, G. Ferrari, and R. Raheli, *Phase Noise Suppression and Frequency Jumps Mitigation Algorithms, "Performance Check and Introduction of Specialized Algorithms"*, Technical Report, University of Parma, November 2013

### International Conference Publications

1. Maawia, Rabiai Mohammed, Shahid Khan, Hazrat Ali, Safdar Nawaz Khan Marwat, Muhammad Asim, *"Miniaturized Off-Centered Fed Dipole Slot Antenna for Multiband Wireless Applications"*, 2019 10th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Metz, France, 2019, pp. 443-447
2. M. Asim, M. Martalo, G. Ferrari and R. Raheli, *Pragmatic code-aided phase synchronization in iterative multi-sample receivers*, in 9th International Symposium on Turbo Codes and Iterative Information Processing (ISTC), 2016, pages: 1-5
3. M. Martalo, G. Ferrari, M. Asim, J. Gambini, C. Mazzucco, G. Cannalire, S. Bianchi, R. Raheli, *Reduced-complexity synchronization for high-order coded modulations*, IEEE International Conference on Communications (ICC), London, 2015, pages: 4721-4726
4. M. Martalo, G. Ferrari, M. Asim, J. Gambini, C. Mazzucco, G. Cannalire, S. Bianchi, R. Raheli, *Phase noise compensation for dually-polarized systems with independent transmission streams*, International Symposium on Wireless Communication Systems (ISWCS), Brussels, pages: 251-255.