



**Dr Syed Jalal Ahmad, B.E, M.E, Ph.D.**

Dr. Syed Jalal Ahmad graduated in Electronics & Communication Engineering from NIT Srinagar formally Regional Engineering College, Srinagar Jammu and Kashmir, India in 2002. He did M.E in Digital Communication & Networking from VMRF Salem Tamil Nadu, India in 2007. He did his Doctorate degree from JNTU Hyderabad in Electronics and Communication Engineering

SJA's key enthusiasm is to become a teacher in academia so as to have an opportunity to teach, guide, encourage and instruct graduate, postgraduate and Research students. He strongly trusts in the significance of education in the general public, and at the same time teaching has provided him with rewarding experiences during his tenure at GNI and MREC. He believes that the information we built as practitioners and researchers turns precious only if it is shared with others. Thus, during his tenure at [GNI-India](#), he had the opportunity to teach and advice both graduate postgraduate and Research students.

SJA has started his career as Lecturer at [SSM college of Engineering and Technology](#) Srinagar, Kashmir, J & K, India. He taught various subjects such as Electronic Devices and Circuits, Analog and Digital Communication and Microwave Engineering. During such tenure he got the chance to implement his teaching skills by combining a firm hypothetical base with practical hands-on experience. As a result, many of his graduate students excelled in National competitions and have become qualified for IES, Group1 and Group2 exams in India. As part of his teaching duties, he also attended advanced teaching seminars, where he discussed different teaching issues, challenges and course design techniques. He also designed the course on microwave engineering. In addition to the subject of course design and teaching, the most insightful parts were the discussions with peer young teachers and the feedback from experienced professors.

During 2006-2008, SJA has served as an Assistant professor at [Ayaan College of Engineering and Technology](#), Hyderabad India where he taught Principles of electrical engineering and control system and achieved good results. Also he has been appointed as a mentor for 30 students who also got placements in reputed MNCs.

During 2008-2011, he worked as Associate Professor at Moghal College of Engineering and Technology, Hyderabad India. Subsequently promoted as HOD of ECE Dept. During that tenure, he improved and upgraded all labs suitable for research works.

During 2011-2016, he joined as Associate Professor & Research & Head at [JB Institute of Engineering and Technology \(Autonomous by UGC\), Hyderabad India](#). The department of ECE Organized a National (CVIP 2012) and an International conferences (ICSS 2013). He played a vital role as the co- convener of the international conference and organizer of national conference. He was also honoured for achieving 100 % pass results. He has supervised and guided more than 10 thesis for M.Tech projects.

During January 2016 to April 2018, he was elevated as Professor at [Guru Nanak Institutions](#) where he taught Microwave Engineering, Analog communication, EDC and special classes on Data communication and Electronic Circuit Analysis. The department of ECE Organized three international conferences (i.e ICIECE 2016, ICIECE 2017, ICIECE 2018) under his convenorship.

During 2018 to 2019, he served as Professor in ECE and held additional charge of HOD EE at [MIET JAMMU](#).

Presently he continues to work as full-time Professor in the department of ECE at [Malla Reddy Engineering College Autonomous Main Campus](#), Hyderabad, India.

His approach of teaching is to incorporate both a solid theoretical foundation, with hands- on experience by leading students arriving at a problem, and formulating hypothesis, and find a solution. The proper teaching of Microwave Engineering, for example, cannot be limited to the presentation of techniques and notations. Instead, it must focus on the understanding of its essential difficulties, and the principles used in its analysis, design and implementation. This can only be grasped by the combination of theory, as an enlightening factor, with hands-on experiences that allow students to understand the problem and apply the same in practical life. He believes, many of the problems faced in Microwave Engineering fields are a consequence on the way this subject has been traditionally taught. Traditional Microwave courses focus on the exposition of techniques and approaches without much connection to the problems. In nutshell, by adopting a teaching philosophy that combines a solid theoretical background with handsome experience, P r o f . **Syed Jalal Ahmad** goal is to connect theory with practice, thus transmitting the knowledge acquired during years of research first to students, and through them to society as a whole.

When teaching the students, SJA finds himself as a bridge between the research and the practice of Communication system. He recognizes his role as a channel to disseminate the experience gained in the Communication engineering by means of research & teaching to the leading industry professionals and researchers of tomorrow.

### **Recent Publications**

- S. J. Ahmad, V. S. K. Reddy, A. Damodaram, P. R. Krishna, "Efficient Path Estimation Routing Protocol for QoS in Long Distance MANETs", *ISDA 2012 IEEE*

*Explore*, pp. 178-183, 2012.

- Syed Jalal Ahmad ; A. Damodaram ; V. S. K. Reddy ; P. Radha Krishna “Packet loss estimation using Poisson random process for improving multimedia transmission in MANETs” ICACCI 2013 Page(s):661 - 666
- Syed Jalal Ahmad, V.S.K. Reddy, A. Damodaram, P. Radha Krishna, "An Improved QoS and Ranking Paths for Multimedia Traffic over MANETs", Information Technology (ICIT) 2014 International Conference on, pp. 41-46, 2014.
- Syed Jalal Ahmad and P. Radha Krishna, “Security on MANETs using Block Coding”. International Conference on Advances in Computing, Communications and Informatics (ICACCI), pp 2054–2060, 2015.
- Ahmad S.J., Reddy V.S.K., Damodaram A., Radha Krishna P. (2016) “A Dynamic Priority Based Scheduling Scheme for Multimedia Streaming Over MANETs to Improve QoS”. In: Bjørner N., Prasad S., Parida L. (eds) Distributed Computing and Internet Technology. ICDCIT 2016. Lecture Notes in Computer Science, vol 9581. Springer, Cham.
- S.Jalal Ahmad, V.S.K.Reddy, A. Damodaram, P. Radha Krishna. “Detection of Black Hole Attack Using Code Division Security Method (CDSM). Advances in Intelligent Systems and Computing, Springer publication. vol 2 pp 307-314
- Unissa I., Ahmad S.J. (2019) “Enhanced Security of MANETs Against Black Hole Attacks Using AS Technique” In: Kumar A., Mozar S. (eds) ICCCE 2018. ICCCE 2018. Lecture Notes in Electrical Engineering, vol 500. Springer, Singapore
- Aleem M., Singh R.P., Ahmad S.J. (2019) “Enhance Multiple Moving Target Detection in Doppler-Tolerant Radar Using IRAESC Technique”. In: Saini H., Singh R., Patel V., Santhi K., Ranganayakulu S. (eds) Innovations in Electronics and Communication Engineering. Lecture Notes in Networks and Systems, vol 33. Springer, Singapore
- Mohammad S.N., Singh R.P., Dey A., Ahmad S.J. (2019) “ESMBCRT: Enhance Security to MANETs Against Black Hole Attack Using MCR Technique”. In: Saini H., Singh R., Patel V., Santhi K., Ranganayakulu S. (eds) Innovations in Electronics and Communication Engineering. Lecture Notes in Networks and Systems, vol 33. Springer, Singapore
- Bhure R.D., Manjunath Chari K., Ahmad S.J. (2019) DDTRCSTCT: Design of Doppler Tolerant Radar Code to Increase SNR Using Trellis Code Technique. In: Saini H., Singh R., Patel V., Santhi K., Ranganayakulu S. (eds) Innovations in Electronics and Communication Engineering. Lecture Notes in Networks and Systems, vol 33. Springer, Singapore
- Unissa I., Ahmad S.J., Radha Krishna P., “Improved Visible light communication Using Code Shift Keying Modulation”. Accepted for publication in ICDCIT conference 2019.
- Ishrath Unissa, Ch. Raja, Syed Jalal Ahmad, Multilevel Authentication to wireless sensor networks against malicious attacks using Butterfly Method, accepted for publication in ICAS PACE 2021. Springer Publication (LNCS)
- S. Jalal Ahmad, V. S. K. Reddy, A. Damodaram, P. Radha Krishna. ‘Location Aware and Energy Efficient Routing Protocol for Long Distance MANETs’ international

journal of networks and virtual organization vol.13, No.4 pp 327- 350, 2013.Inderscience publication.

- S.Jalal Ahmad, V.S.K.Reddy, A. Damodaram, P. Radha Krishna “Delay Optimization using Knapsack Algorithm for Multimedia Traffic in MANETs” Expert Systems with Applications vol.42 pp 6819-6827 (2015).www.elsevier.com/locate/eswa.
- Mohamed Sameena and Syed Jalal Ahmad, “Design of FM0/Manchester Encoding Technique for DSRC Applications.” International Journal of Applied Sciences, Engineering and Management ISSN 2320 – 3439, Vol. 04, No. 02, December, 2015, pp. 119 – 127.
- Fatima Firdous and Syed Jalal Ahmad, “Patch Based Context Analysis of Pulmonary Nodules.” International Journal of Advanced Technology and Innovative Research” ISSN 2348–2370 Vol.07, Issue.18, December-2015, Pages: 3579-3587.
- R. K Singh, D.Elizabeth Rani, Syed Jalal Ahmad, “RSBHCWT: Re-Sampling Binary Hex Code Windowing Technique To Enhance Target Detection” Indian Journal of Science and Technology, Vol 9(47),pp 1-5, DOI: 10.17485/ijst/2016/v9i47/105952, December 2016
- R. K Singh, D.Elizabeth Rani, Syed Jalal Ahmad, “HQECMT: Hex Quadratic Residue Ex-Or Coded Matrix Technique to Improve Target Detection in Doppler Tolerant Radars” International Journal of Science & Research (PONTE, Italy), vol. 73, No 1, pp 21-28, jan2017.
- S.Jalal Ahmad, P. Radha Krishna, ‘BHQRSM - Binary Hex Quadratic Residue Security Model to Enhance the Trust in MANETs’, Wireless Personal Communication (2018) 101: 661. <https://doi.org/10.1007/s11277-018-5710-9>.
- S. Jalal Ahmad, Ishrath Unissa, M Shoukat Ali‘FA-CCM: A Feedback and Active Congestion Control Mechanism for Multimedia Transmission in MANETs, International Journal of Research and Analytical Reviews, Vol 4,issue 4, pp 927- 935.
- R. K Singh, D.Elizabeth Rani, Syed Jalal Ahmad, “LBCCOET: Linear Block coding Complimentary Over Sampled Ex-OR Technique to detect multiple moving targets in Doppler tolerant radar” (Communicative)
- Ishrath Unissa and Syed Jalal Ahmad , “ Optimization of Side Lobes in High Resolution Radars using Digital Codes” (Communicative)
- Ishrath Unissa; Syed Jalal Ahmad; Shoukath Ali Mohammed; Abhay Kumar, “Enhanced Security to MANETs using Digital Codes”, submitted in Journal of Information Security and Applications
- Ishrath Unissa; Syed Jalal Ahmad, "High-level of Authentication to Wireless Sensor Networks using Redundancy Method" submitted to Ad Hoc & Sensor Wireless Networks

### **Books Published**

- Digital System Design
- Programming in C
- Basic Electrical Engineering

- Analog Communication
  - Digital Communication
  - Antenna and Wave Propagation
  - Analog Electronics and Circuits
  - Wireless Ad-hoc Networks
  - Computer Organization And Architecture
  - Advance / Digital Data Communications
  - Optical Communications Technology
  - Network Security
  - Electromagnetic Theory and Transmission Lines
- Long Binary Sequences with Good Auto and Cross Correlation Properties

### International Book Chapter

- Unissa I., Ahmad S.J., Radha Krishna P. (2019) Optimum Spectrum Sensing Approaches in Cognitive Networks. In: Rehmani M., Dhaou R. (eds) Cognitive Radio, Mobile Communications, and Wireless Networks. EAI/Springer Innovations in Communication and Computing. Springer, Cham. DOI: [https://doi.org/10.1007/978-3-319-91002-4\\_9](https://doi.org/10.1007/978-3-319-91002-4_9).
- S. Jalal Ahmad, Bhure R.D., and Manjunath Chari K, “Enhance probability of moving targets detection in Doppler tolerant Radar using windowing techniques” has been approved for our forthcoming Edited volume “Deep Learning for Remote Sensing and GIS: Frontier Advancements and Applications”.
- S. Jalal Ahmad, Bhure R.D., and Manjunath Chari K, “Signal Detection for OFDM Systems using Sensing Approaches in Cognitive Networks has been accepted for publication as a Book chapter in the proposed book Machine Learning Methods for Signal, Image and Speech Processing by River Publisher, 2021.

### Certificates & Awards Received

- Awarded 6<sup>th</sup> rank in Common Entrance Test conducted by the competent Authority of J & K for Bachelor of Engineering.
- Passed the Certificate ‘A’ National Cadet Corps, held under the authority of Ministry of Defense, Government of India.
- Awarded the position of Commander NCC Contingent in the Independence Day Parade for the year 1988-89.
- Best teacher award at JBIET Hyderabad
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