

Dr. Tata Jagannadha Swamy

Professor & Dean Career Guidance
Electronics and Communication Engineering (ECE)
GRIET, Hyderabad-90
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Academics

- Ph.D., from JNTUH, Hyderabad, India, 2016, in Electronics and Communication Engineering (Wireless Communication Networks)
- ME.(Master of Engineering), from University College of Engineering, Osmania University, Hyderabad, India, 2006, in Systems and Signal Processing (SSP- ECE)
- B.Tech., from Acharya Nagarjuna University, Guntur, India, 2001, in (ECE)

Research Interest & Subjects Taught

- Wireless Sensor Networks and Cognitive Radio
- Wireless Communication Networks
- Cognitive Radio,
- Cyber Physical System,
- Control Systems
- Signal Processing and Communication Networks
- Digital Signal Processing
- Signals and Systems
- Probability Theory and Stochastic Process
- Electromagnetic Theory and Transmission Lines
- VLSI

- Digital IC Applications
- Linear IC Applications
- Pulse and Digital Circuits
- WLAN & PANs
- Computer Networks
- Electronic Devices and Circuits

Experience (18 + Years Dedicated Experience in Academics & 10+ Strong Experience in Research)

1. Professor (ECE) & Dean Career Guidance, GRIET, 2018(December) to Present
2. Professor & HoD, Department of Electronics and Communication Engineering GRIET, 2017(April)-December 2018
3. Professor, Department of Electronics and Communication Engineering GRIET, 2016(Aug)-2017(April)
4. Associate Professor, Department of Electronics and Communication Engineering, GRIET, 2006(Dec)- 2016(Aug)
5. Assistant Professor, Department of Electronics and Communication Engineering, GRIET 2005(Dec)-2006(Dec)
6. Assistant Professor, Department of Electronics and Communication Engineering, MREC, 2004(July)-2005(Dec)
7. Assistant Professor, Department of Electronics and Communication Engineering, RMCE, 2002(Aug)-2004(Jul)
8. Assistant Professor, Department of Electronics and Communication Engineering, SIET, 2001(OCT)-2005(Aug).

Department/Institution Appointments (Selected)

- Member GRIET “Strategic Planning Committee”-SPC(2020-2025)
- Member GRIET “Strategic and Planning Committee”-SPC(2015-2020)
- NBA, Dept Coordinator for 2006, 2009, 2014, 2016, 2017
- NAAC, Dept Coordinator 2013, 2019(Dept-Criteria1 Coordinator)
- UGC Autonomous, Dept Coordinator 2014
- “Strategic and Planning” Member Secretary, GRIET 2015-20
- GR11 ECE, GR14ECE, GR15ECE, and GR17 ECE, GR18 BOS Member Secretary, Chairmen and Member
- Received Appreciations letters from Principal, GRIET(Best Performance in Results and Marks-8 Times)
- Praganya Member-2007, 2008, 2009, 2010 GRIET
- Best Teacher award by RMCE, Ibharahimpatnam, Hyderabad
- Coordinator, ECE Students Association, RMCE, Ibharahimpatnam, Hyderabad
- Department Infrastructural Development Member, GRIET in 2013, 2014, 2015, 2016, 2017, 2018

Selected Publications

JOURNALS

- T. Jagannadha Swamy, G. Ramamurthy, "Optimal, Secure Cluster Head Placement Through Source Coding Techniques in Wireless Sensor Networks," in **IEEE Communications Letters**, vol. 24, no. 2, pp. 443-446, Feb. 2020. **doi: 10.1109/LCOMM.2019.2953850**
- T.Jagannadha Swamy, KVSVR PRASAD, Garimella Ramamurthy "Novel Energy Efficient Dynamic Routing Protocol for Wireless Sensor Networks, International Journal of Advanced Research in Computer Science 5 (7), 9-15, 2014. **doi.org/10.26483/ijarcs.v5i7**
- DVK, T Jagannadha Swamy, "VHDL Design and Implementation of C.P.U by Reversible Logic Gates",IJASTEMS, 2 (12), 108-112, 2016. **doi:10.22413/ijastems.**
- T.Jagannadha Swamy, G.Ramamurth, "Cost Minimization of Sensor Placement and Routing in Wireless Sensor Networks Placement and Routing Issues in a Random Plane", Emerging Innovations in Wireless Networks and Broadband Technologies, 1, 115-134, 2016. **doi: 10.4018/978-1-4666-9941-0.ch006.**
- Meer G, T. Jagannadha Swamy, " A Novel Power Reduction Design using Approximate Adders for Inexact Computing", IJSETR, Vol 3, Issue 10, 2014. ISSN: 2278 – 7798.
- Tata Jagannadha Swamy & Jayant Vaibhav Srivastava & Garimella Ramamurthy, 2012. "Non Uniform Grid Based Cost Minimization and Routing in Wireless Sensor Networks," International Journal of Wireless Networks and Broadband Technologies (IJWNBT), IGI Global, vol. 2(1), pages 16-28, January, 2012. **10.4018/ijwnbt.2012010102.**
- Tata Jagannadha Swamy, Thaskani Sandhya and Dr. Garimella Ramamurthy, Energy Efficient Architecture to Cognitive Radio Wireless Sensor Networks, International Journal of Computer Networks and Wireless Communications (IJCNWC), ISSN: 2250-3501, Vol. 2, No. 6, December 2012.

CONFERENCES

- Dr.T.Jagannadha Swamy, G. Pavan Krishna, T.N.Murthy, “Novel Secure Multipurpose Information Service and Management System with the help of Internet of Things”, *2020 International Conference on Computer Communication and Informatics*, Coimbatore, 2020, Vol 1, pp 1-6. **978-1-7281-4514-3/20/&31.00©2020IEEE**
- Dr. T. Jagannadha Swamy, M K Aishwarya “Design of Power Efficient and High-Performance Architecture to Spectrum Sensing Applications Using Cyclostationary Feature Detection”, *CISC 2019 (Springer-Cognitive Informatics and Soft Computing)* 1 (1), 1-6, https://doi.org/10.1007/978-981-15-1451-7_1, 15 January 2020
- Dr. G. Ramamurthy, **T. Jagannadha Swamy**, “Gibbs-Shannon Entropy and Related Measures: Tallis Entropy(**Best Paper Award**)”, *International Conference on Communications, Signal Processing and VLSI (IC2SV 2019)*, 1 (1), 1-9, October 23-24, 2019
- Bhanushree Kolipaka, Dr. T. Jagannadha Swamy,, ,“ Brain Tumour detection and classification using Graphical user Interface”, *International Conference on Innovation in Electronics and Communication Engineering*”, *ICIECE-2019*, Hyderabad 8 (1), 1-6
- SM Krishna, Dr. T. Jagannadha Swamy, “IoT based automatic door control system for smart homes based on facial recognition”, *International Conference on Innovation in Electronics and Communication Engineering*”, *ICIECE-2019* 8 (1), 45-50.
- T. J. Swamy and T. N. Murthy, "eSmart: An IoT based Intelligent Health Monitoring and Management System for Mankind," *2019 International Conference on Computer Communication and Informatics (ICCCI)*, Coimbatore, Tamil Nadu, India, 2019, pp. 1-5. **doi: 10.1109/ICCCI.2019.8821845**
- T. J. Swamy, T. Sandhya and G. Ramamurthy, "Link evaluation of uniform grid based wireless sensor networks to base station with leveling and clustering," *2013 International Conference on Computer Communication*

and Informatics, Coimbatore, 2013, pp. 1-5.
doi: 10.1109/ICCCI.2013.6466146

- T. J. Swamy, S. Avasarala, T. Sandhya and G. Ramamurthy, "Spectrum sensing: Approximations for Eigenvalue ratio based detection," *2012 International Conference on Computer Communication and Informatics*, Coimbatore, 2012, pp. 1-5.
doi: 10.1109/ICCCI.2012.6158914
- T.Jagannadha Swamy, Dr. K.V.S.R.Prasad, "Maximizing the overall throughput of Radio Frequency Spectrum Management in Cognitive Radio Environment", ICACM 2011, 1 (1), 144-148
- T.Jagannadha Swamy, Dr. K.V.S.V.R. Prasad, "DEEP: Dynamic Energy Efficient Protocol to Wireless Sensor Networks for Secure Routing, ICMID-2010 1 (1), 285-290.

Books/Book Chapters

- Tata Jagannadha, and Garimella Rama Murthy. "Cost Minimization of Sensor Placement and Routing in Wireless Sensor Networks." (2016).*Cost Minimization of Sensor Placement and Routing in Wireless Sensor Networks. P.No: 115-131, Emerging Innovations in Wireless Broadband Networks, IGI Global, USA, ISBN: 9781466699410, 2016.*
- Tata Jagannadha Swamy, and Garimella Rama Murthy. "Cost Minimization of Sensor Placement and Routing in Wireless Sensor Networks: Placement and Routing Issues in a Random Plane." *In Sensor Technology: Concepts, Methodologies, Tools, and Applications*, pp. 1286-1301. IGI Global, 2020.

R & D Projects

1. API-Associate to Principle Investigator: Adhoc and Mobile Wireless Sensor Networks to e-health Monitoring Systems-A project sponsored by DST, Govt. of India, PI, Dr. Garimella Rama Murthy, Professor IIIT Hyderabad(Completed).

Workshops Attended (selected)

1. QIPPDTA Workshop by JNTUH, Hyderabad
2. Quality Initiatives in Technical & Higher Education Institutions by ESCI- Hyderabad
3. Outcome Based Education and Accreditation by JNTUH, Hyderabad
4. Management Capacity Enhancement Programme by IIMU, Udaipur, Rajasthan, India
5. Research & Training Methodologies in Electrical Engineering, IITH, Hyderabad
6. Cognitive Radio Design, IITH, Hyderabad
7. Cooperative Communication Systems, IIITH, Hyderabad
8. Education Technologies for Engineering Teachers, IITB
9. Team Building, by ICS, Chennai
10. Industry Conclave, IST, ICFAIU, Hyderabad
11. Software Defined Radio, GRIET, Hyderabad, 2015
12. VLSI Design hands on experience on CADANCE, 2006, CVRCE, Hyderabad.

Workshops Conducted (Selected)

- Digital communication workshop through DSKKITS
- Organized Industry Institute Interaction session
- Organized Basic Simulations using Matlab Session
- Organized-Outcome based Education importance
- ICMID-2010(International Conference)
- A 3day workshop on System/PCB Design
- Three day workshop on “smart IoT”
- A workshop on PCB Design in association with IETE, GRIET
- A Two day workshop on “Matlab to HDL”, GRIET
- Building own APPs in association with IETE, GRIET
- Estimation theory and Cognitive Radio Networks for signal processing, IIITH
- FDP on Introduction to Signals and Systems with Matlab in associate with IETE

Reviewer (Journals)

1. International Journal of Wireless Networks and Broad Band Technologies (IJWNBT)(International Journal Research Paper Reviewer), IGI Publications, USA.
2. International Journal of Network Management(IJNM-Wiely) International Journal Paper Reviewer, Wiely Publications, USA

Reviewer (Conferences)

1. Springer, International Conference on Soft Computing and Signal Processing (ICSCSP18)
2. Springer, International Conference on Wireless Sensor Networks-2018

Guest Lectures

1. Speaker at Communication Police Training under CSR, Govt. of Telangana 2017-2018
2. Fundamentals of Electronic Circuits, RMCE, Ibrahimpatnam, Hyderabad 2005
3. Digital Signal Processing, , MEC, Miryalaguda, Telangana 2008
4. Digital Signal Processing , RMCE, Ibrahimpatnam, Hyderabad 2005
