PRATEEK RAJ GAUTAM

prateekrajgautam@gmail.com | (+91) 915 140 4899 | prateekrajgautam.github.io
E 540/9 Avas Vikas (1) Kalyanpur Kanpur UP – 208 017, India.

EDUCATION

June 2016 – Present ***(3 years and 8 months)***	**Ph.D. Full time/Regular** (EC / Sensor Localization in WSNs) at MNNIT Allahabad, Prayagraj *(Thesis writing in progress, published in **IEEE Transaction on Industrial Informatics, impact factor = 7.377, IEEE IET Communications** as first author)*.
July 2009 – December 2011	**M. Tech.** (Electronics and Communication Engineering) from Harcourt Butler Technological Institute Kanpur, UP with 67.55%.
July 2004 – June 2008	**B. Tech.** (Electronics and Communication Engineering) from University Institute of Engineering and Technology, CSJMU Kanpur, UP with 62%.

EXPERIENCE

July 2013 – December 2015 ***(2 years and 5 months)***	**Assistant Professor** Electronics and Communication Engineering Department, Allenhouse Institute of Technology, Rooma, Kanpur, UP.
June 2012 – July 2013 ***(1 year and 1 month)***	**Assistant Professor** Electronics and Communication Engineering Department, Naraina College or Engineering and Technology, Ratanpur, Kanpur, UP.

PUBLICATIONS & REVIEW

ORCID : 0000-0002-2889-4275

Publons/Web of Science ResearcherID : I-9311-2017

SCI/SCIE

[1] **Gautam, P. R.,** Kumar, S., Verma, A., Rashid, T., & Kumar, A. (2019). Energy-Efficient Localization of Sensor Nodes in WSNs Using Beacons from Rotating Directional Antenna. ***IEEE Transactions on Industrial Informatics***, *15*(11), 5827–5836. https://doi.org/10.1109/TII.2019.2908437

[2] **Gautam, P. R.,** Kumar, S., Verma, A., & Kumar, A. (2020). A Novel Energy-Efficient Localization of Sensor Nodes in WSNs using Single Beacon Node. ***IET Communications***, *15*(11), 1–1. https://doi.org/10.1049/iet-com.2019.1298

[3] Verma, A., Kumar, S., **Gautam, P. R.,** Rashid, T., & Kumar, A. (2020). Fuzzy Logic based Effective Clustering of Homogeneous Wireless Sensor Networks for Mobile Sink. *IEEE Sensors Journal*, 1–1. https://doi.org/10.1109/JSEN.2020.2969697

[4] Kumar, S., **Gautam, P. R.,** Verma, A., Rashid, T., & Kumar, A. (2020). An Energy-Efficient Transmission in WSNs for Different Climatic Conditions. *Wireless Personal Communications*, *110*(1), 423–444. https://doi.org/10.1007/s11277-019-06735-x

[5] Verma, A., Rashid, T., **Gautam, P. R.,** Kumar, S., & Kumar, A. (2019). Cost and Sub-Epoch Based Stable Energy-Efficient Clustering Algorithm for Heterogeneous Wireless Sensor Networks. *Wireless Personal Communications*, *107*(4), 1865–1879. https://doi.org/10.1007/s11277-019-06362-6

[6] Yadav, M., **Gautam, P. R.,** Shokeen, V., & Singhal, P. K. (2017). Modern Fisher–Yates Shuffling Based Random Interleaver Design for SCFDMA-IDMA Systems. *Wireless Personal Communications*. https://doi.org/10.1007/s11277-017-4492-9

Scopus/UGC-listed

[7] Rashid, T., Kumar, S., Verma, A., **Gautam, P. R.,** & Kumar, A. (2019). RB-IEMRP: RELAY BASED IMPROVED THROUGHPUT ENERGY-EFFICIENT MULTI-HOP ROUTING PROTOCOL FOR INTRA BODY SENSOR NETWORK (INTRA-WBSN). *International Journal of Computer Networks & Communications*, *11*(02), 69–82. https://doi.org/10.5121/ijcnc.2019.11205

[8] Kumar, S., **Gautam, P. R.,** Rashid, T., Verma, A., & Kumar, A. (2018). *ETDCC : Energy-Efficient Transmission Scheme for Dynamic Climatic Conditions in WSN*. *16*(3), 1126–1134. https://doi.org/10.12928/TELKOMANIKA.V16i3.8513

[9] Rashid, T., Kumar, S., Verma, A., **Gautam, P. R.,** & Kumar, A. (2018). Pm-EEMRP: Postural movement based energy efficient multi-hop routing protocol for intra wireless body sensor network (Intra-WBSN). *Telkomnika (Telecommunication Computing Electronics and Control)*, *16*(1). https://doi.org/10.12928/TELKOMNIKA.v16i1.7318

[10] Verma, A., Rashid, T., **Gautam, P. R.,** Kumar, S., & Kumar, A. (2017). Fuzzy based Stable Clustering Protocol for Heterogeneous Wireless Sensor Networks. *International Journal of Engineering and Technology*, *9*(4), 2854–2860. https://doi.org/10.21817/ijet/2017/v9i4/170904046

Conferences proceedings and book chapters

[11] **Gautam, P. R.,** Kumar, S., Verma, A., Rashid, T., & Kumar, A. (2020). *Localization of Sensor Nodes in WSN Using Area Between a Node and Two Beacons*. https://doi.org/10.1007/978-981-32-9775-3_22

[12] Verma, A., Kumar, S., **Gautam, P. R.,** & Kumar, A. (2020). *Stable Energy-Efficient Routing Algorithm for Dynamic Heterogeneous Wireless Sensor Networks*. https://doi.org/10.1007/978-981-32-9775-3_15

[13] **Gautam, P. R.,** Kumar, S., Verma, A., & Kumar, A. (2019). Localization of Sensor Nodes in WSNs using Three Dimensional Angle of Arrival detection at BS. *2019 International Conference on Electrical, Electronics and Computer Engineering (UPCON)*, 1–4. https://doi.org/10.1109/UPCON47278.2019.8980262

[14] Kumar, S., **Gautam, P. R.,** Verma, A., Verma, R., & Kumar, A. (2019). Energy Efficient Routing using Sectors Based Energy-Hole Reduction in WSNs. *2019 International Conference on Electrical, Electronics and Computer Engineering (UPCON)*, 1–4. https://doi.org/10.1109/UPCON47278.2019.8980254

[15] Kumar, A., Kumar, S., **Gautam, P. R.,** Verma, A., & Rashid, T. (2019). *Performance Evaluation of Multi-operands Floating-Point Adder*. https://doi.org/10.1007/978-981-13-2685-1_51

[16] Kumar, S., Verma, A., **Gautam, P. R.,** Dayal, A., & Kumar, A. (2018). The Load Balancing of Optimizing LEACH Clustering Algorithm with Mobile Sink and Rendezvous Nodes. *2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)*, 1–6. https://doi.org/10.1109/UPCON.2018.8596989

[17] Roy, S., Gautam, P. R., & Yadav, M. (2016). QRS complex detection and filtering of ECG signal using wavelet transform International, *Journal of Computer Engineering and Applications*, X(Vi), 35–44.

[18] Singh R., Gautam, P. R., & Sharma, A. (2015). Energy Efficient Design of Multiplexer Using Adiabatic logic. Int. Journal of Electrical & Electronics Engg., 2(1), 2426.

Peer reviewer of following Journals/Conferences

- IEEE Transactions on Industrial Informatics **(Three reviews submitted).**

RESEARCH INTEREST

Wireless Sensor Networks, CDMA, Brain-wave Mapping.

KEY SOFTWARE SKILLS AND CHARACTERISTICS

- **Matlab**
- **LaTeX** (tikz/beamer)
- **Github**, Github pages, Jekyll, **Web design**, hosting and server management, **WordPress**, *(Designed and hosted conference (vcas2018) website at MNNIT ECED available online at mnnit.ac.in/vcas2018)*
- **Linux**, Terminal, and Windows
- **Python** *(Designed GUI based hotspot software available online at fwh.mgeek.in)*
- Photoshop/ Corel draw / Inkscape / GIMP
- **LabVIEW/LTspice**
- Good typing speed
- Adaptability

AWARDS, ACHIEVEMENTS & MEMBERSHIP

- Awarded **Rajiv Gandhi National Fellowship** for PHD from 2017 to current.
- **Eight** times **GATE (EC)** qualified.
- **Three** times **NET (Electronic Sciences)** qualified.
- **IEEE s**tudent member (4 years) **ID: 91250146.**

PERSONAL PROFILE & DECLARATION

Date of birth: **17 June 1987**
Father's name: **SHRIRAM GAUTAM**
Mother's name: **ARCHANA GAUTAM**

I consider myself to be familiar with the various aspects of electronics and communication engineering. I hereby declare that the above information given is true to the best of my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.