Manifestation
of
IEEE Uttar Pradesh Section Young Professional Star Award for the Month of June 2021

Dr. Gaurav Verma has been selected IEEE Uttar Pradesh Section Young Professional Star Award for the month of June 2021. We congratulate Dr. Gaurav Verma, JIIT Noida, UP for the achievement. His perception about the IEEE, society and young professionals are reflected in this discussion. Here are the exerts of the interview with Gaurav Verma made by Sumit Kumar Tiwari, IEEE UP Section Young Professionals Committee member.

About Dr. Gaurav Verma

Dr. Gaurav Verma received B. Tech., M. Tech., and Ph.D. degrees in Electronics and Communication engineering in 2005, 2012, and 2018 respectively. He has done his B.Tech. from COER (U. P. Technical University), M.Tech. from IIT Kharagpur and Ph.D from Jaypee University, Noida. In addition to that he has also acquired a MBA degree in marketing management from IMTDOLI, Ghaziabad in 2008. Since 2013, Dr. Gaurav Verma is working as an Assistant Professor (Senior Grade) and Head of Research Group (IOT, Embedded & AI) in the department of Electronics & Communication Engineering, Jaypee Institute of Information Technology, Sector-62 campus, Noida (UP), India. He has started his career as a trainer in VLSI and embedded domain at CIPL, Noida in 2005 and promoted to the position of Assistant Manager in just 2 years. From 2007 to 2013, he has served at different engineering colleges at different positions like DBIT, Dehradun (2007-2008), DIT Dehradun, (2008-2010) and VIT, Greater Noida (2012-2013). He has around 15 years of experience in training, teaching, research and administration. He has multi-disciplinary ability in teaching and training latest technologies. His current research focuses on development of IOT & Embedded based solutions for the benefit of society and power estimation of FPGA Implementations using Machine Learning. He is an active researcher with around 25 publications in reputed SCI & SCOPUS journals and around 40 publications in conferences of IEEE & Springer repute. He has also authored a book on Embedded System Design for students and published more than 5 book chapters in springer. He is a senior member of IEEE and also served as a TPC member, session chair and keynote speaker in some of the reputed conferences in India and abroad. He is also serving as a member of Website and Portal Management Sub-Committee, IEEE UP Section (R-10), India, as an editor, advisor, and a reviewer of several well-known international journals published by IEEE, Taylor & Francis, Springer, and Elsevier. He has also awarded with the Best

Doctoral Thesis award in RACE-2019 at Kasetsart University, Bangkok, Thailand.

1. What are your words of motivation?

The only key to success is the hard work. There is no shortcut to get the success. There are always ups and downs in life. However, we should be more focussed in down times and keep trying again and again. As what I experienced is patience is important when things are not going according to your way.

2. What was the specific reason, if any, which made you, join IEEE?

IEEE is one of the oldest and largest research societies. I am an electronics engineer and very much fascinated about the research and innovations happening in this area. IEEE provides the right platform to showcase your research along with huge repository support of conference papers and articles. Moreover, it provides the opportunity to interact and connect with the learned researchers in your area.

3. As a Young Professional, how do you position your interest in your own field with the activities and services you perform as an IEEE member/ volunteer?

I have joined IEEE in 2008, when I was serving at DIT University, Dehradun. Actually, there was IEEE student chapter and I was given the responsibility to conduct various activities under it. Later on, I had attended various conferences as a student member of IEEE during my post-graduation at IIT Kharagpur, Kolkata section and understood its importance. Further, I started IEEE student branch at JIIT Noida as graduate and served around 5 years. serving as a member of Website and Portal Management Sub-Committee, IEEE UP Section (R-10), India, as an editor, advisor, and a reviewer of several well-known international journals published by IEEE

4. What are your thoughts about IEEE membership and its paybacks? Whether the IEEE membership benefited you at any time in your career growth? If so, how?

IEEE membership have various tangible and in tangible benefits. It provides you the opportunity of networking with the people who are working in your research area. You can get discounts on registration fees for attending events sponsored by IEEE. You would have the opportunity to read some paid articles free and remains get updated by the new happenings through newsletter subscription. You would get a chance serve in various committees once you reach at the senior member level. These are some of the benefits that I personally got and helps in my career growth

5. As a Young Professional, what are the changes or developments you would like to see in evolving this professional body as a group devoted to humanity and its causes?

The innovation and incubation is the key development that I would to see in

evolving IEEE. Through innovative ideas, we can provide solutions of various problems devoted to humanities related to health, automation, pollution, harvesting etc.

6. What are your suggestions and recommendations for those young professionals who may aspire to join IEEE?

IEEE is the best platform which provides various types of memberships as per your requirement. Initially, you may start with student membership and understand the policies, benefits and protocols. Later on, you may join as graduate member as you would develop interest and understood its importance.

7. As a Young Professional and a young researcher in the field, how do you consider the prospects of scientific research in this field for the benefit of humanity?

The evolving technologies have led the engineers to develop solutions for benefits of humanities. Whether it is related to home automation, smart health solutions, smart transportation, smart irrigation, smart rain water harvesting, smart agriculture or in a broader sense smart cities or villages. The IEEE provides the platform to engineers to identify the research problems and mould their solutions through its huge repository support of journals and conference papers.

8. What is your recent exciting research works that may have significant societal impact?

My current research focuses on development of IOT & Embedded based solutions for the benefit of society and power estimation of FPGA Implementations using Machine Learning. I have worked on several societal problems like I have filed a patent on "A Wearable Smart Health Monitoring Device for Covid-19 patients, developed published research articles on "Low Cost Smart Ground System for Rainwater Harvesting for Indian Houses Using IoT Technology" ,"Electricity Theft Detection and Localization in Smart Grids for Industry 4.0" and "Vehicle Pollution Monitoring, Control and Challan System Using MQ2 Sensor Based on Internet of Things".

9. What's the advice you would give to a young professional who is just starting his/ her career?

My advice to the young professionals is to think about innovation and innovative ideas. Become job creator's not just job seekers.

10. Anything else that you would like to add?

It is indeed an honor and I would like to thank the IEEE Uttar Pradesh section young professional committee to consider me worthy of this award.