Manifestation of IEEE Uttar Pradesh Section Young Professional Star Award for the Month of January 2022

About Dr. Prakash Dwivedi

Dr. Prakash Dwivedi received a Bachelor of Technology degree in Electrical Engineering from the Faculty of Electrical & Technology, Gurukul Kangri Vishwavidyalaya, Haridwar, India in 2008, Master of Technology in Signal Processing & Control from the Department of Electrical Engineering, National Institute of Technology, Hamirpur, India in 2010 and a Ph.D. degree in Control System from Department of Electrical Engineering, Visvesvaraya National Institute of Technology, Nagpur, India in 2018. He is currently an Assistant Professor (Grade-I) at the Department of Electrical Engineering at the National Institute of Technology, Uttarakhand, India.

His research areas are Control Scheme for Various Applications in Power System and Power Electronics Such as Load Frequency Control of Multi Interconnected Area for Hybrid Micro-Grid systems, Close Loop Control of DC-DC Isolated and Non-isolated Converter, Bi-directional DC-DC Converter, Fractional Control System, Anti-Windup Techniques, etc.

1. What are your words of motivation?
I belong to a middle-class family from Uttarakhand. Middle-class families have many expectations from their children. My family also had a lot of expectations from me. But in higher secondary examinations, I did not get the results as expected, and my father advised me to go for BSc. So I took admission in BSc, but I wanted to pursue B. Tech. Then I started preparing for the same by myself and got admission in Electrical Engineering. After completing my B. Tech. one of my friend's fathers suggested that I should go for a master's program at NIT, but I was not sure that I could do it. They forced me to do it, told me to believe in myself, and go for it. Today, I am doctorate and working here at NIT Uttarakhand as an Assistant Professor. Therefore, believe in yourself, don't be disappointed with your failures, and try for your goal consistently.
2. What was the specific reason, if any, which made you join IEEE?
When I was working as a teacher at NIT Uttarakhand in 2014, I realized if I need to continuously evolve and explore my area of research then IEEE will help me a lot. The community there would motivate and guide me to do better. So I joined IEEE at that time.

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?
As an IEEE member, I worked as a conference chair at the UPCON conference in November 2021. I have organized several events under the student branch chapter of IEEE NIT Uttarakhand. All these activities helped me to discover new exciting things about my field from my colleagues and also guide my students in the same.

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?
As an IEEE member, I have enjoyed several perks which were helpful in my career growth. It provided me the opportunity of networking with the people who are working in my area of interest. I got discounts on registration fees for events sponsored by IEEE. Also, I got the opportunity to read high-quality articles and newsletters free of cost.

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 changes I would suggest to evolve this professional body as a group devoted to humanity and its causes is that we focus and promote our research to solve problems that need immediate intervention such as pollution, healthcare, and education.

6. What are your suggestions and recommendations for those young professionals who may aspire to join IEEE?
IEEE is the best platform for one's professional development. They help you build professional relations which can lead to some great joint ventures. New research around the world is presented through newsletters in a structured manner. You get an opportunity to attend several conferences/workshop and get new exciting ideas.

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?
Science is valued by society because the application of scientific knowledge helps to satisfy many basic human needs and improve living standards. Research in the field will help humanity in creating a sustainable future by creating energy-efficient systems. Things like E-vehicles, and solar energy will be a great tool to solve the energy crises we are facing. This field also helps in automating dangerous and repetitive human tasks. Innovation in this field will help society in tackling challenges in different sectors such as transport, farming, and healthcare.
8. What is your recent exciting research works that may have significant societal impact?
Presently, I am trying to design the power converters and controllers for E-Vehicles in hilly terrain. The technology help in the efficient energy usage of energy in vehicles and will reduce our energy consumption drastically.

9. What’s the advice you would give to a young professional who is just starting his/her career?
Be hardworking and innovative. And do any work assigned to you, thinking you are doing it for yourself.

10. Anything else that you would like to add?
It is an honour and I would like to thank the IEEE Uttar Pradesh section young professional committee for considering me worthy of this award.