

The Institute of Electrical and Electronics Engineers (IEEE)

Joint GBS Societies Chapter ONLINE PRESENTATION



ONLINE MEETING

"Solid State Transformers and Their Applications in Marine Energy Systems" Friday April 24th, 2020, 11:30 AM-12:30 PM

PRESENTER: Dr. Harish Sarma Krishnamoorthy, University of Houston

PRESENATION: Marine energy applications are making huge strides in today's world in the form of offshore wind, subsea power, electric ships, etc. With the push for smarter systems, it is important to also make the interface transformers smaller and lighter for the future marine energy applications through the use of power electronics. This talk will start with the basics of conventional transformers and solid state transformers (SSTs). Following this, the talk will go over some of the important architectures and designs involving SSTs for marine applications such as offshore wind, subsea electrification, and electric ships.

PRESENTER: Dr. Harish Krishnamoorthy received his Bachelor of Technology degree from the Electrical and Electronics Engineering department, National Institute of Technology (NIT) Tiruchirappalli, India and his Doctor of Philosophy degree from the ECE department, Texas A&M University, College Station, USA; in 2008 and 2015, respectively. From Jun. 2008 to Jul. 2010, he worked as an Electronics Engineer with GE Energy, Hyderabad, India and received the Lean Six Sigma Green Belt certification there. From Apr. 2015 to July 2017, he was an Electrical Engineer with Schlumberger, Sugar Land, TX, USA. He has also briefly worked with Ford and Google Inc. Since Aug. 2017, Dr. Krishnamoorthy has been working as an Assistant Professor in the ECE department of University of Houston. He has published over 40 IEEE conference and journal papers; and has one granted patent. He has also co-authored a book chapter under IET. He is a Senior Member of IEEE and the Chair of the IEEE PELS Young Professionals group. He is also an Associate Editor of the IEEE Transactions on Power Electronics. His research interests are: High density power conversion; statistical methods for improvement in quality and reliability of power electronics, advanced power electronics and control for applications such as downhole (sub-sea and land), electric vehicles, renewable energy, 4G/5G envelope tracking, etc.

COMPLIMENTARY REGISTRATION

**PLEASE register by COB Wednesday, April 22, 2020, by emailing your name, IEEE Member/non-member, and IEEE society member (if any) to Dr Zafar Taqvi to Z.TAQVI@IEEE.ORG
**All those registered will be provided on-line sign in details. The meeting is open only to those registered

Online Meeting Host: Dr Irfan Khan, Instructional Assistant Professor | Dept. Marine Engineering Tech. (TAMUG)

Vice Chair/PES (Joint Societies Chapter/IEEE Galveston Bay Section)

Reservations to attend this meeting should be made by email to: Dr Zafar Taqvi Z.TAQVI@IEEE.ORG