



Report
Distinguished Lecture Program
Organized by
IEEE Signal Processing Society, Gujarat Chapter
In association with
IEEE SPS CKPCET SBC and IEEE CKPCET SB

Date: 10th march 2023

Time: 11:00 to 12:30 AM

Venue: Seminar Hall, D2 Building, ECC Dept., CKPCET, Surat

Advisor:

Dr. Chirag Paunwala (Chair, IEEE SPS Gujarat Chapter)

Coordinators:

Dr. Mita C. Paunwala, HoD ECED, Branch Counsellor IEEE CKPCET SB

Dr. Amisha Shah, Assistant Professor ECED, Faculty advisor IEEE SPS CKPCET SBC

Student Coordinators:

Mr. Harsh Bhaliya, Student Chair IEEE CKPCET SB

Mr. Prakash Bhutaiya, Student Chair IEEE SPS CKPCET SBC

Number of Participants: 15 (IEEE members)
60 (Non IEEE members)

Speaker: Prof. Gaurav Sharma (University of Rochester, USA)

Bio-sketch of speaker:



Short Biography Gaurav Sharma is with the University of Rochester, where he is a Professor in the Department of Electrical and Computer Engineering , Department of Computer Science , and Department of Biostatistics and Computational Biology. He is also a Distinguished Researcher in Center of Excellence in Data Science (CoE) at the Goergen Institute for Data Science . From 2008-2010, he served as the Director for the Center for Emerging and Innovative Sciences (CEIS), a New York state supported center for promoting joint university-industry research and technology development, which is

housed at the University of Rochester. From 1996 through 2003, he was with Xerox Research and Technology in Webster, NY first as a member of research and technology staff and then as a Principal Scientist and Project Leader. He received the Ph.D. in Electrical and Computer Engineering from North Carolina State University, Raleigh, NC, and masters degrees in Applied Mathematics from NCSU and in Electrical Communication Engineering from the Indian Institute of Science, Bangalore, India. He received his bachelor of engineering degree in Electronics and Communication Engineering from Indian Institute of Technology, Roorkee (formerly, Univ. of Roorkee). Dr. Sharma is a fellow of the IEEE, a fellow of SPIE -- the international society for optics and photonics, and a fellow of the Society for Imaging Science and Technology (IS&T). He is also an elected member of Sigma Xi, the scientific research society and the Phi Kappa Phi and Pi Mu Epsilon honor societies.

Dr. Sharma was a 2020-21 Distinguished Lecturer of the IEEE Signal Processing Society and has previously served as an SPIE Visiting Lecturer. Dr. Sharma served as the Editor-in-Chief for the IEEE Transactions on Image Processing from 2018-2020 and as the Editor-in-Chief for the Journal of Electronic Imaging from 2011 through 2015. Dr. Sharma is a member of the Editorial Board of the Proceedings of the IEEE and has previously served and as an associate editor for the Journal of Electronic Imaging, for the IEEE Transactions on Information Forensics and Security and for the IEEE Transactions on Image Processing. He is the editor of the "Digital Color Imaging Handbook" published by CRC press. Dr. Sharma served as the 2010-2011 chair for the Image, Video, and Multi-dimensional Signal Processing Technical Committee, of the IEEE Signal Processing Society and as the 2007 Chair of the IEEE Rochester Section. He is also a past member of the IEEE Spectrum Editorial Advisory Board, the Information Forensics and Security Technical Committee, the Multimedia-Signal Processing Technical Committee of the IEEE SPS, and of the Industry DSP Technology Standing Committee, of the IEEE Signal Processing Society. He was the Chair and Co-Chair, respectively, for the 2013 and 2012 IS&T/SPIE Electronic Imaging (EI) Symposia and Technical Program Co-Chair for the 2012 and 2016 editions of the IEEE International Conference on Image Processing (ICIP). Dr. Sharma is a member of the IEEE Signal Processing and Communications Societies of the IEEE. He serves on the IEEE Publication Services Product Board (PSPB) and is the current chair of the IEEE PSPB Strategic Planning Committee. From 2015 through 2017 he served as the Treasurer for the IEEE PSPB and in 2017 and 2018 he served as the Chair of the IEEE Conference Publications Committee (CPC). In 2015 and 2016, he served on the IEEE Signal Processing Society's Conferences Board and its Executive subcommittee.

Details of Talk:

Advances in nano-fabrication and MEMS devices have led to radical improvements in sensing technologies in recent years. These improvements are most visible to all of us in our Smartphones that already feature a panoply of miniaturized sensors. Many of the same sensors are also positively impacting several other application domains. In this talk, we highlight how smart light-weight body worn sensors are set to revolutionize health care and the practice of medicine by providing technologies for assessing biomarkers for physiological and physical attributes related to disease condition, treatment effectiveness, and longitudinal progression. In contrast with the subjective, sporadic in-clinic assessments that are in common use today, body-worn sensors can provide objective and repeatable measurements based on extended periods of continuous monitoring. Finally, we highlight ongoing and emerging directions for research and development.



Blessing of Maa Saraswati



Deep Pragatya



Host of the Event



Introduction of Institute



Prayer



Felicitation to Guest of Honour



SPS benefits by Chair, IEEE SPS GS



Memento to IEEE SPS Gujarat Chapter



Falicitation of Speaker



Talk delivered by speaker



Memento to the Speaker



Participants



Vote of Thanks



Interaction with students



Faculties of various departments with Speaker



Organizing team with DL Speaker

Special Thanks to Mr.Kiran Patel and Mr.Bharat Patel for helping in arrangement.

Report prepared by: Mr. Harsh Bhaliya and Mr. Prakash Bhutaiya