

## CIS/GRSS

### Winter School at Vignan University, Guntur

“Winter School on Advances in Remote sensing and its applications” is a five day event organized during 8th – 22nd December, 2019 at VFSTR (Deemed to be University). Dr. N. Rama Rao from IIST, Trivandrum was invited as the Chief Guest for this event. The event kicked off with the inaugural speech by Dr. N. Usha Rani, Senior IEEE Member and Convenor of the event, addressed the gathering stating the importance of Remote Sensing and its key applications, the sole purpose of conducting this event. She stated that the prime reason for conducting the event is to cast light upon Remote Sensing Technology and various related aspects in the contemporary scenario so that one can easily come with new concept or solution to the existing problems in this domain.” The keynote session was given by Mr. Rama Krishna CEO, Efftronics Pvt. Ltd on Industry 4.0 and its significance. Dr. N. Rama Rao, from IIST, Trivandrum discussed on Remote Sensing and key notes on data, approaches and evolving applications. Prof. Alejandro talked about Science, Reproducibility, Replicability in Remote Sensing via a Skype call.



*Dr. Usha Rani felicitating Mr. Anand Jadhav, TDI*

### GRSS DL at MJCET , Social evening at HICC, Gachibowli

CIS/GRSS, IEEE Hyderabad Section organised a social evening with GRSS distinguished lecturer, Prof. Alejandro C. Frery, Universidade Federal de

Alagoas, Maceió, Brazil at HICC, Gachibowli. Prof. Atul Negi, Prof. Alok Singh, University of Hyderabad, T. Hitendra Sarma and Mousmi Ajay Chaurasia joined the evening to discuss the future prospectus of GRSS chapter launch in various student branch and the available funding opportunities from GRSS headquarters.



*L:R: T. Hitendra Sarma, Prof. Alok Singh, Prof. Atul Negi, Prof. Alejandra C. Frery, Mousmi A. Chaurasia*

## Expert talk at CMRIT

An Expert talk on “Applications of Geo informatics to solve ground water problems in hard rock terrain of the country in 2-3 years” was conducted on 7<sup>th</sup> September 2019 at CMR Technical Campus, Hyderabad as a satellite event of IEEE HYDCON 2019 under IEEE Hyderabad Section, Joint Chapter of IEEE CIS/GRSS in association with CMR Technical Campus, Hyderabad. The event was inaugurated by Prof. Arun K. Saraf, Professor in the Department of Earth Sciences, IIT Roorkee, an expert talk Guest, Dr. A. Raji Reddy, Director, CMRTC, Dr. Mousmi Ajay Chaurasia, Secretary/Treasurer, IEEE CIS/GRSS and Saikumar Tara, IEEE CMRTC Student Branch, CMRTC. Over 150 participants from dept of ECE and Civil branches of CMR Technical Campus, Hyderabad attended this talk. Over all the lecture was excellent and outstanding with insights on the research work carried out in the area of Geo informatics specifically focused on under-ground water problem with experimental research carried out in GIS which used MATLAB tool for the process of imaging.



*L-R: T. Sai Kumar, Mousmi A. Chaurasia, A. Raji Reddy felicitating Prof. Arun Sharaf, IIT Roorkee*

## GRSS DL at MJCET , Social evening at HICC, Gachibowli

CIS/GRSS, IEEE Hyderabad Section has organised GRSS distinguished lecturer program at two different locations in association with following IEEE student branches on “PoISAR Scattering Power Factorisation Using a Geodesic Distance”: - BITS Pilani, Hyderabad Campus on 14th October 2019 - MJCET, Hyderabad on 15th October 2019 The speaker of the event was Prof. Alejandro C. Frery, Universidade Federal de Alagoas, Maceió, Brazil. He focussed on generic Scattering Power Factorisation Framework for PoISAR data to directly obtain N scattering power components along with a residue power component. Each scattering power component is factorised into similarity using elementary targets and a generalised volume model. The similarity measure relies on a geodesic distance between pairs of 4x4 real Kennaugh matrices. In standard model-based decomposition schemes, the 3x3 Hermitian positive semidefinite covariance (or coherency) matrix is expressed as a weighted linear combination of scattering targets following a fixed hierarchical process. The program was celebrated on the occasion of IEEE Day and also as a satellite event for 2020 IEEE-HydCon.



*Prof. Alejandro C. Frery delivering his talk*

## John McCarthy Memorial Lecture 2019

Dr. Hitendra Sharma, Chair, Computational Intelligence GRSS Society of IEEE Hyderabad Section launched the 4th John McCarthy Lecture (JML) on 14th November, 2019 at Plaza Hotel. The event was attended by over 60+ IEEE and non-IEEE members. Mr. N Venkatesh, Chair of IEEE Hyderabad Section gave a brief description about the IEEE Hyderabad initiatives and the vibrant activities which collectively resulted in the recognition of 'Outstanding Large Section Award' for IEEE Hyderabad Section. Dr. Atul Negi described the connections associated to Control Systems and embedded logic driving into Artificial Intelligence. Dr. Atul introduced Dr. M. Vidyasagar whose work in Control theory is considered to be commendable and invited him to grace the occasion to speak on Artificial Intelligence. Dr. M. Vidyasagar covered about AI and its impact in building the machines which can sense, analyze, reason and respond. AI excitement has deepened into Sciences with advancements in Image processing, Speech processing, Natural Language processing and Game Playing. Advances in Speech and Natural Language Processing – IVR systems work very well on structured queries but accuracy still needs to be handled on unstructured queries. Some of the On-line translation between languages cannot capture the "mood" – suitable for business contracts but not for poetry. The research community is beginning to recognize that the mathematical foundations of deep learning are not well understood. In contrast, the mathematical foundations of "shallow learning" are quite

well-understood. Lecture was well received by the audience, also comprising of eminent personalities- IEEE Fellow and Padma awardee Prof. Deekshatulu, and IEEE Senior members, Professors and Students from various educational institutions of Hyderabad and NIT Warangal.



*Prof. Atul Negi felicitating Prof. M. Vidyasagar, IIT Hyderabad with N. Venkatesh, Section Chair, Prof. Deekshatulu, fellow IEEE and senior members of IEEE Hyderabad Section*

## Expert talk on Blockchain Technologies at MJCET

CIS/GRSS, IEEE Hyderabad Section in association with IEEE MJCET SB organised an Expert Lecture on “Blockchain Technologies: Applications and Career Opportunities at MJCET, Hyderabad on 6 September 2019 by Mr. Dharmen Dhulha, Tech Mahindra, Hyderabad. He explained many indicators of how high the demand is for people with blockchain skills. Blockchains may have begun in finance to support cryptocurrencies, but now blockchain technology and the solutions it can provide are being explored by industries right from healthcare to insurance to manufacturing and more. He gave instances on the use cases for Financial Services, Government, Healthcare, Internet of Things (IoT) etc.



*L-R: Mr. Dharman Dhulla, Tech Mahindra receiving memento from Mousmi A. Chaurasia with Akhil Agheer and organiser*

**CIS/GRSS Joint Chapter – (17 Activities)**

<b>Event Title</b>	<b>Event Date</b>	<b>Event Category</b>
Implementation of Fast memset() Using Hardware Accelerators on Linux : Hyderabad Section Jt. Chapter, CIS11/GRS29	1/6/2020 11:00	Technical
An Expert Lecture on IaaS - Open Source Cloudstack : Hyderabad Section Jt. Chapter, CIS11/GRS29	1/18/2020 11:00	Technical
IEEE CIS/GRSS Jt. Chapter General Body Meeting 2020 : Hyderabad Section Jt. Chapter, CIS11/GRS29	1/19/2020 13:15	Administrative
One-Day Bootcamp on "Blockchain: Hand-on Ethereum Development" : Hyderabad Section Jt. Chapter, CIS11/GRS29	2/15/2020 9:00	Technical
Blockchain Foundation with Ethereum Platform : Hyderabad Section Jt. Chapter, CIS11/GRS29	2/29/2020 9:00	Technical
A Webinar on Inspired Soft Computing: Application to Prediction of Environmental Hazards : Hyderabad Section Jt. Chapter, CIS11/GRS29	3/27/2020 19:00	Technical
Webinar on "Inspired Soft Computing: Application to Prediction of Environmental Hazards" : Hyderabad Section Jt. Chapter, CIS11/GRS29	3/27/2020 19:00	Technical
CIS/GRSS Joint Chapter Execom Meeting : Hyderabad Section Jt. Chapter, CIS11/GRS29	4/9/2020 19:00	Administrative
Successful scientific publishing: from the project to the advertising : Hyderabad Section Jt. Chapter, CIS11/GRS29	4/13/2020 17:30	Technical
An Overview of Artificial Satellite Technology: State of the Art and Current Trends : Hyderabad Section Jt. Chapter, CIS11/GRS29	4/19/2020 17:00	Technical
Machine Learning and Cyber Security: Continuing Convergence : Hyderabad Section Jt. Chapter, CIS11/GRS29	4/28/2020 11:00	Technical
AI & Cyber security: Trends, Threats and Opportunities : Hyderabad Section Jt. Chapter, CIS11/GRS29	5/20/2020 17:30	Professional
Dynamic multi-objective optimization: challenges and opportunities : Hyderabad Section Jt. Chapter, CIS11/GRS29	5/29/2020 11:30	Professional
IEEE Hyderabad Section: LMAG in association with CIS/GRSS Jt. Chapter Webinar : Hyderabad Section Jt. Chapter, CIS11/GRS29	7/30/2020 17:00	Technical
IEEE-CIS Distinguished Lecture by Prof. Chia-Feng Juang, Taiwan : Hyderabad Section Jt. Chapter, CIS11/GRS29	10/6/2020 17:00	Professional
IEEE HYDERABAD SECTION: LMAG IN ASSOCIATION WITH CIS/GRSS JT. CHAPTER WEBINAR : Hyderabad Section Jt. Chapter, CIS11/GRS29	10/17/2020 16:00	Professional
IEEE Hyderabad Section: CIS/GRSS Jt. Chapter 5th John McCarthy Memorial Lecture : Hyderabad Section Jt. Chapter, CIS11/GRS29	12/17/2020 18:30	Technical