



**IEEE
COMMUNICATIONS
SOCIETY**
Hyderabad Chapter



COMSOC/SPS Joint Chapter IEEE Hyderabad Section

Chapter Highlights

▶ **Taking technology to students and professionals:**

- **HyWIT 2017** – workshop series to celebrate the 50th anniversary of the Viterbi Algorithm
- **“Data Detect Challenge”** – learning DSP & Comm Theory in a fun way.

▶ **Active academia and industry participation**

- Researchers from reputable institutes take tech to students and professionals through lectures and tutorials
- Senior practising engineers share experiences via talks and workshops
- Slate has had equal representation of academia and industry from organizations like the Indian Institute of Technology Hyderabad, OFS Optics, Redpine Signal and Qualcomm.

▶ **Student involvement**

- Launched new student branches with SPS/COMSOC joint chapters
- Enablement of contact of researchers and undergraduates via colloquia
- Workshops on technology fundamentals as well as applications

New Initiatives

► HyWIT 2017

- A Workshop Series on Information Theory, Communications and Signal Processing **launched to celebrate the 50th anniversary of publication of the Viterbi Algorithm**
- Workshops **held on weekends to let students, faculty as well as practising engineers attend**
- The inaugural series touched various aspects of channel coding and applications of the Viterbi Algorithm in communications and signal processing
- Each workshop was a mix of theory and hands on simulations
- At least 65 participants at each session who were awarded certificates
- Sponsored by Qualcomm a company founded by Andrew Viterbi

► “Data Detect Challenge”

- Launched to help students learn to apply Communications Theory and Digital Signal Processing fundamentals in data detection in a fun way
- **Unique online nature** drew 60 participants from all over India.

Flagship Events: AG Bell Lecture

- ▶ AG Bell Memorial Lecture 2017
 - Speaker: Prof K Giridhar, Indian Institute of Technology, Madras
 - Topic: Reliable Wireless Access in the UHF Band by Enabling Multi-Operator Spectrum Sharing
 - 50 participants
 - Venue: International Institute of Information Technology Hyderabad

- ▶ AG Bell Memorial Lecture 2016
 - Speaker: Dr Manish Kothari, Qualcomm Inc
 - Topic: Internet of Things: Technical Challenges and Innovation Opportunities
 - 106 Participants
 - Venue: G Narayanamma Institute of Technology and Science, Hyderabad

Distinguished Lecturer Events

- ▶ SPS Distinguished Lecturer Event – Dec 13th 2016
 - DL: Hamid Krim of NCSU
 - Topic: Convexity, Sparsity, Nullity and all that in Machine Learning
 - 50 participants
 - Venue: Muffakham Jah College
- ▶ COMSOC Distinguished Lecture Event – Mar 15th 2017
 - DL: Dr Ashutosh Dutta, AT&T
 - Topic: Security Challenges and Opportunities in SDN/NFV and 5G Networks
 - 50 Participants
 - Venue: International Institute of Information Technology, Hyderabad

Events in 2017: L31 Reports

S.No.	Meeting Title	Meeting Date	Total Attendees	Event Category
1	IMAGE PROCESSING WORKSHOP	17-Jan-17	47	Technical
2	PRE VIRTUAL AND DYNAMIC WORKSHOP - SAE SNIST	9-Feb-17	35	Technical
3	The Seventh Alexander Graham Bell Memorial Lecture: Reliable Wireless Access in the UHF Band by Enabling Multi-Operator Spectrum Sharing	6-Mar-17	50	Technical
4	COMSOC Distinguished Lecturer Programme by Dr Ashutosh Dutta	15-Mar-17	50	Technical
5	COMSOC COLLOQUIUM	1-Apr-17	65	Technical
6	Workshop on "Principles of Channel Coding"	9-Sep-17	65	Technical
7	Workshop on "The Viterbi Algorithm in Equalization and Modulation"	9-Sep-17	65	Technical
8	Coding Theory Addresses the Challenges of Big Data Storage	16-Sep-17	75	Technical
9	Workshop on "Turbo Codes"	16-Sep-17	65	Technical
10	LDPC Codes	17-Sep-17	65	Technical
11	Polar Codes	23-Sep-17	65	Technical

Events in 2016: L31 Reports

No	Meeting Title	Meeting Date	Attendee	Event Category
1	5G Communications	29-Jan-2016	150	Technical
2	Building Devices for the IoT with WyzBee	29-Jan-2016	150	Technical
3	Wireless Technology for Indoor Positioning	30-Jan-2016	165	Technical
4	Digital Design through Arduino	20-Feb-2016	25	Technical
5	Communications Colloquium	11-Mar-2016	130	Technical
6	Internet of Everything -Technical Challenges and Innovation Opportunities	24-Mar-2016	106	Technical
7	The Challenges of Medical Equipment Hardware and Software Design	25-Jun-2016	480	Technical
8	Workshop on Medical IoT	12-Nov-2016	50	Technical
9	Data Detect Challenge	04-Dec-2016	60	Technical
10	Comsoc/SPS DL with Hamid Krim	13-Dec-2016	44	Technical
11	Hyderabad Section ComSoc/SPS Joint Chapter Dinner with SPS DL - Hamid Krim	13-Dec-2016	10	Nontechnical

2016 – Completed Events Summary

Calendar - 2016

No.	Date	Event	Speaker	Venue	Status
1	29/Jan	Technical talk: '5G Communications'	<u>Abhinav Kumar</u> , IITH	CVRCE	Completed
2	29/Jan	Workshop: "Building devices for the <u>IoT</u> with WyzBee"	Milan Tandel, Redpine	CVRCE	Completed
3	30/Jan	Technical talk: "Wireless Technology for Indoor Positioning"	N Venkatesh	CVRCE	Completed
4	20/Feb	Workshop: Digital Design through <u>Arduino</u>	GVV Sharma, IITH	IITH	Completed
5	11/Mar	Workshop: "Wireless Communication in the <u>IoT</u> with WyzBee"	Milan/Rajasekhar, Redpine	VBIT	Completed
6	12/Mar	Technical talk: "The Invisible Network"	Kasyapa Balemarthy	VBIT	Completed
7	12/Mar	Technical talk: "Digital Signal Processing for Speech"	Sanjeev <u>Nimishakavi</u>	VBIT	Completed
8	12/Mar	Technical talk: "Digital Modulation"	GVV Sharma, IITH	VBIT	Completed
9	24/Mar	6 th Annual AG Bell Memorial Lecture: "Internet of Everything - Technical Challenges and Innovation Opportunities"	Manish Kothari, VP, Qualcomm	GNITS	Completed
10	9/Apr	Workshop: "Matrix Analysis through Octave"	GVV Sharma, IITH	IITH	Completed
11	12/Apr	Inaugural of <u>Comsoc</u> Student Chapter at CVR College of Engineering	N Venkatesh	CVRCE	Completed
12	25/June	Technical talk: "Medical Equipment Hardware and Software Design"	Christina DeMur	VJIT	Completed
13	6/Aug	Technical talk, and inauguration of <u>Comsoc</u> SB	Sanjeev N	GPREC	Completed
14	17/Sep	Colloquium: "Advances in Wireless for Healthcare"	N Venkatesh	GCET	Completed
15	12/Nov	Medical <u>IoT</u> Workshop	Multiple	<u>Vaira</u>	Completed
16	8/Dec	Communications <u>Hackathon</u> - Data Detect Challenge	NA	Online	Completed
17	13/Dec	Distinguished Lecturer Event - Signal Processing Society	Dr. <u>Hamid Krim</u>	MJCET	Completed
18	13/Dec	DL Social Event - Dinner with <u>Hamid Krim</u>	NA		Completed

