

11th Indian Conference on Computer Vision, Graphics and Image Processing

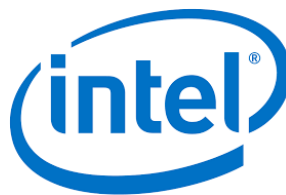
ICVGIP-2018

Conference Program

Quick Overview

Date	Event	Venue
18th Dec, 2018	Workshops, Tutorials (summary on last page)	IIIT Campus, Gachibowli, Hyderabad
19th Dec, 2018	Main Conference	ISB Campus, Gachibowli, Hyderabad
20th Dec, 2018	Main Conference	ISB Campus, Gachibowli, Hyderabad
21st Dec, 2018	Main Conference	ISB Campus, Gachibowli, Hyderabad
22nd Dec, 2018	Hyderabad AI Symposium	Infosys Campus, Gachibowli, Hyderabad

Sponsors



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 You can access the papers at: <http://cvit.iiit.ac.in/icvgip18/proceedings>

2nd Workshop on Digital Heritage (WDH-2018)

Time	Event	Speaker, Paper
09:00 - 09:15	Inauguration	Welcome address by PC chairs
09:15 – 09:45	Invited talk	Prof Sambit Dutta, Professor, Computational Urban Science in the School of Electrical Engineering, Curtin Institute for Computation, Australia
09:45 – 10:15	Invited talk	Prof. Partha Pratim Das, Professor, Department of Computer Science & Engineering, IIT Kharagpur
10:15 – 10:30		Tea Break
10:30 – 12:00		Oral Session 1
10:30 – 10:50	Paper ID 3	Enock Osoro Omayio; Indu Sreedevi
10:50 – 11:10	Paper ID 5	Dipannita Podder ; Jayanta Mukherjee ; Shashaank Mattur Aswatha; Shamik Sural
11:10 – 11:30	Paper ID 8	Mayank Wadhvani ; Debapriya Kundu; Bhabotosh Chanda
11:30 – 11:50	Paper ID 9	Chirumamilla Nagalakshmi ; Snehasis Mukherjee
11:50 – 12:30	Invited Talk	Prof Bhabotosh Chanda, Professor, Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata
12:30 – 14:00		Lunch
14:00 – 14:30	Industry Session	AR, VR for Experiencing Heritage in Cyber Space Anupama Mallik & Geetika Sharma (Vizara Tech)
14:30 – 15:00	Invited Talk	Accelerated Computing to Enhance Digital Heritage Mr. Ashish Ashish Sardana (NVIDIA).
15:00 – 16:00		Oral Session 2
15:00 – 15:20	Paper ID 10	Akash Kumar ; Sagnik Bhowmick ; Jayanthi N ; Indu Sreedevi
15:20 – 15:40	Paper ID 11	Anand R; Paramasivam ME ;Sabeenain R.S
15:40 – 16:00	Paper ID 16	S. Kulkarni; A. Kagalkar; V Hurakadli ; A. Ganpule ; R Raju Dhanakshirur ; R. Tabib ; Uma Mudenagudi
16:00 – 16:15		Tea Break
16:15 – 17:15	Panel Discussion	Moderator: Santanu Chaudhury, Director, IITJ; Panellists: P J Narayan, Director IIIT HBD; Vijay Chandru Yantri Labs Inc.; Achal Mittal, Sr Principal Scientist, CSIR, Roorkee; N R Visalachy, Dept. of Archaeology and Museum
17:15 – 17:30		Concluding Session

3rd Workshop on Computer Vision Applications (WCVA-2018)

Time	Speaker / Author	Title
9:00-9:10	Inauguration	
9:10-10:00	Prof. Saket Anand, IIIT Delhi	Vision for Wildlife: from Conservation to Conflict Management
10:00-10:15	Hazem Rashed, Senthil Yogamani, Ahmad El-Sallab, Arindam Das	Depth augmented Semantic Segmentation networks for Automated Driving
10:15-10:30	Ambika Sharma, Monika Aggarwal, Sumantra Dutta Roy, Praveen Vashist, Vivek Gupta, Talvir Sidhu	Optic Disc Segmentation in Fundus Images Using Anatomical Atlases with Nonrigid Registration
10:30-11:00	Tea Break	
11:00-11:15	Akash Kumar, Sourya Dipta Das	Bird Species Classification using Transfer Learning with Multistage Training
11:15-11:30	Kishor Upla, Vishal M Chudasama	Progressive Approach to Single Image Super-Resolution using Generative Adversarial Network
11:30-11:45	R K Gupta, S D Lakhani , Z U Khedawala, V M Chudasama, K P Upla	A Deep Learning Paradigm for Automated Face Attendance
11:45-12:00	Saksham Jain, Indu Sreedevi	Robust Detection of Iris Region Using an Adapted SSD Framework
12:00-12:15	Sumeet Saurav, T Naga Datta Madhu Kiran, BSK Reddy, K S Srivastav, Sanjay Singh	Dynamic Image Networks for Human Fall Detection in 360-degree Videos
12:15-12:30	Rohan R Dhanakshirur, Zeba Patel, Smita C Yadavannavar, Uma Mudenagudi	Image segmentation and geometric feature based approach for fast video summarization of surveillance videos
12:30-12:45	T A Sumesh, Vinay P Namboodiri, Phalguni Gupta	Supervised Hashing for Retrieval of Multimodal Biometric data
12:45-1:00	Siddhesh Thakur, Bhakti Vilas Baheti, Sahas S Gajre, Sanjay Talbar	Pose estimation for Distracted Driver Detection using Deep Convolutional Neural Networks
1:00-1:10	Closing Session	

4th Workshop on Document Analysis and Recognition (DAR-2018)

Time	Speaker, Paper	
9:00-9:10	Inauguration	
9:10-9:30	M. Kumar, R. K. Sharma, M. Jindal, S. Rani and H. Singh	Benchmark Datasets for Offline Handwritten Gurmukhi Script Recognition
9:30-9:50	Vishal Rajput, N Jayanthi and Indu Sridevi	An Efficient Character Segmentation Algorithm for Connected Handwritten Documents
9:50-10:10	Harmandeep Kaur and Munish Kumar	Benchmark Dataset: Offline Handwritten Gurmukhi City Names for Postal Automation
10:10-10:30	M.A. Kaljahi, P.V.V. Varshini, P. Shivakumara, U. Pal, T. Lu and D.S. Guru	Word-Wise Handwriting based Gender Identification using Multi-Gabor Response Fusion
10:30-11:00	Tea Break	
11:00-11:20	Chandra V Sekhar, Viswanath Pulabaigari and Srinivasa Chakravarthy	An efficient Multi Lingual Optical Character Recognition system for Indian languages through use of Bharati Script
11:20-11:40	Ridhi Aggarwal, Gaurav Harit and Anil K Tiwari	Symbol spotting in offline handwritten mathematical expressions
11:40-12:40	Prof. A.G. Ramakrishnan, IISc Bangalore	Attention Feedback Vs DNN
12:40-14:00	Lunch	
14:00-14:20	S Sen, J Chakraborty, S Chatterjee, R Mitra, R Sarkar and K Roy	Online Handwritten Bangla Character Recognition using FD and Distance based Features
14:20-14:40	Arnab Poddar, Rohan Mukherjee, Jayanta Mukherjee and Prabir Kumar Biswas	MultiDIAS: A Hierarchical Multi-layered Document Image Annotation System
14:40-15:00	Koteswara Rao Devarapalli and Atul Negi	Telugu Word Segmentation using Fringe Maps
15:00-15:20	Divya Sharma, Gaurav Harit and Chiranjoy Chattopadhyay	Attributed paths for layout-based document retrieval
15:20-15:40	Chandra V Sekhar and Viswanath Pulabaigari	A Deep Learning Architecture Based Dimensionality Reduction and Online Signature Verification
15:40-16:00	S Ghosh, R Bhattacharya, S Majhi, S Bhowmik, S Malakar and R Sarkar	Textual content retrieval from Filled-in Form Images
16:00-16:30	Tea Break	
16:30-16:50	Rahul Pramanik, Prabhat Dansena and Soumen Bag	A Study on the Effect of CNN-based Transfer Learning on Handwritten Indic and Mixed Numeral Recognition
16:50-17:20	Chandra V Sekhar, Viswanath Pulabaigari and D S Guru	A Secure and Light Weight User Authentication System Based on Online Signature Verification for Resource Constrained Mobile Networks
17:20	Closing Session	

5th Workshop on Medical Image Processing (MedImage 2018)

Time	Paper ID	Speaker / Author	Title
9:00		Opening Remarks	
9:15-10:15		Prof. Ross Whitaker University of Utah, USA	Machine Learning in Shape Analysis
10:15-11:00	Tea Break		
10:45 - 12:25	15	Rohit Garg, Ganesh Singadkar, Anindya Hajra	Deep Learning based Approach for Spermatogenic Staging in Wistar Rat
	3	Debanjali Bhattacharya, Sunil Kumar Vengalil, Neelam Sinha, Jitender Saini, Vani Santosh	Classification of grade-III Astrocytomas based on IDH mutation using LBP texture analysis from structural MRIs
	9	Swaraj kumar, Shaurya Chaturvedi. Sandipan Dutta, MPS bhatia	SkiDNet: Skip Image Denoising Network for X-Rays
	16	Rachana Sathish, Debdoot Sheet, Abhilash Nandy	Identification of Cervical Pathology in Colposcopy Images using Adversarially Trained Convolutional Neural Networks
	11	Shanka S Mondal, Debdoot Sheet, Rachana Sathish	Multitask Learning of Temporal Connectionism in Convolutional Networks using a Joint Distribution Loss Function to Simultaneously Identify Tools and Phase in Surgical Videos
12:40-14:00	Lunch		
14:00-15:00		Prof. C. Kesavdas SCT Institute for Medical Sciences and Technology, Trivandrum	Medical Image processing : A journey of collaborations
15:00-15:40	11	Naveen Paluru, Mohana Murali Dasari, Sai Siva Gorthi, Gorthi Rama Krishna Sai Subrahmanyam	Tracking by Detection and Counting by Tracking of RBCs and Sperm cells In Imaging Cytometry
	20	Vibha Gupta, Arnav Bhavsar	Bagging and Boosting Simplistic Class-Specific Features for HEP-2 Cell Classification
15:40-16:30		Poster Session	Includes all papers presented in the oral sessions, and those invited for 'presentation only' track
16:00-16:30	Tea Break		
16:30-17:30		Dr. Bipul Das and Dr. Rahul Venkataramani GE Global Research, Bangalore	Learning with Priors in Healthcare Imaging
17:30	Closing Remarks		

Day 1: 19th Dec. Venue: ISB Hyderabad

Time	Session (Theme) @Venue	Paper ID	Speaker / Author	Title
8:00 - 8:45	@ Corridor	Registration, Breakfast		
8:45 – 9:00	Opening	<ul style="list-style-type: none"> ○ Remarks from General Chair, C.V. Jawahar ○ Remarks from Program Chair, Anoop Namboodiri ○ Guest of Honour, Rajendra Srivastava (Dean ISB) ○ Chief Guest, P.J. Narayanan (Director, IIITH) 		
9:00 - 10:00	Plenary 1 @ Khemka	Peter Wonka (KAUST) <i>Chair: P J Narayanan</i>		Generative Models for Urban Design
10:00 - 10:30	@ Corridor	Tea Break		
10:30 - 10:50	Oral 1 (Geometry and Visualization) <i>Chair: Vijay Natarajan</i> @ Khemka	74	Vignesh Prasad, Dipanjan Das and Brojeshwar Bhowmick	Epipolar Geometry based Learning of Multi-view Depth and Ego-Motion from Monocular Sequences
10:50 - 11:10		81	Nayan Joshi, Yogesh Sharma, Madhava Krishna, Brojeshwar Bhowmick, Rishabh Khawad and Parv Parkhiya	Integrating Objects into Monocular SLAM: Line Based Category Specific Models
11:10 - 11:22		15	Neeladrishekhar Kanjilal and Parag Chaudhuri	Real-time Simulation of Human Musculature
11:22 - 11:34		56	Mansi Sharma	An Integrated Optimization Approach for Depth Map Enhancement on Special Riemannian Manifold
11:34 - 11:46		64	Udyan Khurana, Parikshit Sakurikar and P. J. Narayanan	SLFT: A Physically Accurate Framework for Tracing Synthetic Light Fields
11:46 - 11:58		73	Sai Sagar and Avinash Sharma	SplineNet: B-Spline Neural Network for efficient classification of 3D data
12:00 - 12:45	Poster Highlights 1 (Geometry and Visualization) <i>Chairs: Chetan Arora & Kaushik Mitra</i>	25	Sumukh Bansal and Aditya Tatu	Lie Bodies Based Deformation Transfer
		31	Mohit Sharma and Vijay Natarajan	On-Demand Augmentation of Contour Trees
		36	Alphin Thottupattu, Shivin Yadav and Avinash Sharma	Non-rigid Registration using Spectral Graph Wavelet features
		54	Soumabha Bhowmick, Jayanta Mukherjee and Alok Kanti Deb	An incremental topological map building algorithm using monocular vision

	@ Khemka	71	Debaditya Roy, Sanjay Bharath Gaddam Sreedatta, Mani Kumar T. and C. Krishna Mohan	Tracking rapid body deformation using sparse representation of deep features	
	Poster Highlights 2 (Face, Body and Action)	8	Muhammed Fasil C. and Subhasis Chaudhuri	Moving Average Recurrent Neural Network Model for Video-based Person Re-Identification	
		9	Kamireddy Sai Suma, Gedela Aditya and Snehasis Mukherjee	Activity Recognition in Egocentric Videos Using Bag of Key Action Units	
		13	Shobhanjana Kalita, Arindam Karmakar and Shyamanta Hazarika	A Temporal Activity Graph Kernel for Human Activity Classification	
		23	Srijan Das, Kaustubh Sakhalkar, Michal Koperski and Francois Bremond	Spatio-Temporal Grids for Daily Living Action Recognition	
		32	Aniket Dashpute, Rishubh Parihar and Prem Kalra	Scene Adaptive Cosmetic Makeup Transfer	
		37	Ashish Goyal, Neha Bhargava, Subhasis Chaudhuri and Rajbabu Velmurugan	Hierarchical Deep Network for Group Discovery and Multi-level Activity Recognition	
		41	Sudip Das, Partha Sarathi Mukherjee and Ujjwal Bhattacharya	Seek and You Will Find: A New Optimized Framework for Efficient Detection of Pedestrian	
		43	Doney Alex, Zishan Sami, Sumandeep Banerjee and Subrat Panda	Cluster Loss for Person Re-Identification	
		@ Khemka	45	Kankana Roy and Rajiv Sahay	Dynamic Gesture Recognition with Pose-based CNN Features derived from videos using LSTM
			63	Hiteshi Jain and Gaurav Harit	Leveraging information from imperfect examples: Common action sequence mining from a mix of incorrect performances
	66		Vinay Kaushik, Prerana Mukherjee and Brejesh Lall	Nrityantar: Pose oblivious Indian classical dance classification	
	68		Bindu Verma and Ayesha Choudhary	Dynamic Hand Gesture Recognition using Convolutional Neural Networks with RGB-D Fusion	
	79		Narayan Vetrekar, Raghavendra Ramachandra, Kiran Raja, Rajendra Gad and Christoph Busch	Disguise Face Recognition based on Spectral Imaging	
	Chairs: Chetan Arora & Kaushik Mitra				

12:45 - 2:00	@ Atrium	Lunch		
2:00 - 3:00	Plenary 2 @ Khemka		Bernt Schiele (Max-Planck Institute) Chair: Santanu Chaudhury	Person Centric Computer Vision: Tracking, Pose Estimation and Trajectory Prediction
3:00 - 3:20	Oral 2 (Face, Body and Action) Chair: Uma Mudenagudi @ Khemka	10	Javed Imran and R Balasubramanian	Multimodal Egocentric Activity Recognition Using Multi-Stream CNN
3:20 - 3:40		70	Avishek Lahiri, Abhinav Agarwalla and Prabir Biswas	Unsupervised Domain Adaptation for Learning Eye Gaze from a Million Synthetic Images: An Adversarial Approach
3:40 - 3:52		21	Santosh Kumar Vipparthi, Monu Verma, Jaspreet Kaur and Girdhari Singh	EXPERTNet: Exigent Features Preservative Network for Facial Expression Recognition
3:52 - 4:04		24	Avishek Bhattacharjee, Samik Banerjee and Sukhendu Das	SpoofNET: Resolving Facial Makeup based Spoofs
4:05 - 5:20	@ Atrium	Tea Break		
	Poster 1 (Geometry & Visualization; Face, Body and Action) @ Atrium	Poster Session – 1		
5:20 - 6:00	DDA 1 @Khemka	Presentation: IUPRAI Doctoral Dissertation Award Winners Chair: Bhabatosh Chanda		
6:00 - 6:45	Panel Discussion @Khemka	<p>Panel Discussion on <i>Business Applications and Innovations of Computer Vision, AI and ML</i></p> <p>Moderator: Milind Sohoni, Deputy Dean, ISB</p> <p>Panel:</p> <ul style="list-style-type: none"> • Shailesh Kumar, Reliance Jio • Ali Eslami, Google DeepMind • Sathya Ranganatha, Standard Chartered Bank • Peter Wonka, KAUST 		

Day 2: 20th Dec. Venue: ISB Hyderabad

Time	Session (Theme) @Venue	Paper ID	Speaker / Author	Title	
8:00 - 9:00	@ Corridor	Breakfast			
9:00 - 10:00	Plenary 3 @ Khemka	Tinne Tuytelaars (KU Leuven) <i>Chair: Subhashis Chaudhuri</i>		Keep on Learning	
10:00 - 10:30	@ Corridor	Tea Break			
10:30 - 10:50	Oral 3 (Deep Learning meets Signal/Image Proc.) <i>Chair: A N Rajagopalan</i>	19	Spoorthi GE, Subrahmanyam Gorthi and Gorthi Rama Krishna Sai Subrahmanyam	A Deep Learning-based Model for Phase Unwrapping	
10:50 - 11:10		61	Srimanta Mandal, Kuldeep Purohit and Rajagopalan Ambasamudram	Color Image Super Resolution in Real Noise	
11:10 - 11:22		42	Kushal Borkar and Snehasis Mukherjee	Video Dehazing using LMNN with respect to Augmented MRF	
11:22 - 11:34		49	Abhinav Kumar, Shantanu Gupta, Vladimir Kozitsky and Sriganesh Madhvanath	Transferable and Fast Licence Plate Re-identification using a Neural Embedding of Fisher Vectors	
11:34 - 11:46		@ Khemka	62	Arpan Gupta and Sakthi Muthiah	Temporal Cricket Stroke Localization from Untrimmed Highlight Videos
11:46 - 11:58			67	Shruti Sharma, Santanu Chaudhary, Jayadeva and Snigdha Bhagat	Sparse Signal Recovery for Multiple Measurement Vectors with Temporally Correlated Entries: A Bayesian Perspective
12:00 - 12:45	Poster Highlights 3 (Deep Learning meets Signal/Image Proc.) <i>Chairs: Vinay Namboodiri, Snehasis Mukherjee</i> @ Khemka	7	Debanjan Sadhya, Akshay Agarwal and R Balasubramanian	Perfectly Secure Shamir's Secret Sharing Scheme for Privacy Preserving Image Processing Over Cloud	
		18	Saurabh Kumar and Subhasis Chaudhuri	A Fast Method for Very Low Bit-Rate Coding of Hyperspectral Images	
		22	Ranjan Mondal and Bhabotosh Chanda	Anomaly Detection using Context Dependent Optical Flow	
		29	S. Bardhan and Shibu Jacob	Regularized Random Walk Ranking for Co-Saliency Detection in images	
		39	Sasithradevi Anbalagan, Md Mansoor Roomi and M Mahisha	Shot Boundary Detection in Videos Using Saliency based Statistical Model	
		40	Pavan Sandula and Manish Okade	Compressed domain zoom motion detection and classification based on application of local ternary patterns on block motion vectors	

		48	Monika Mathur and Nidhi Taneja	Dual domain approach for colour enhancement of underwater images
		72	Shruti Sharma and Santanu Chaudhary and Jayadeva	Temporal Modeling of EEG Signals using Block Sparse Variational Bayes Framework
		75	Priya Mariam Raju, Deepak Mishra and Gorthi Rama Krishna Sai Subrahmanyam	Bag of Visual Words based Correlation Filter Tracker(BoVW-CFT)
		78	Sidharth Gautam, Tapan Gandhi and Bijaya Ketan Panigrahi	Single image dehazing using image boundary constraint and nearest neighborhood optimization
		80	Satendra Singh and Gaurav Bhatnagar	A Chaos Based Robust and Secure Image Hashing Framework
	Poster Highlights 4 (Applications , Medical) <i>Chairs:</i> <i>Vinay Namboodiri, Snehasis Mukherjee</i> @ Khemka	2	Annapurna Sharma and Dinesh Babu J.	Handwritten Essay Grading on Mobiles using MDLSTM Model and Word Embeddings
		4	Vijay John, Swarn Rathour and Seiichi Mita	Vision-based Steering Angle Prediction by the Fusion of Depth and Intensity Deep Features
		14	Srikrishna Varadarajan and Muktabh Mayank Srivastava	Weakly Supervised Object Localization on grocery shelves using simple FCN and Synthetic Dataset
		17	Anupama Arun, Thomas James Thomas, Sheeba Rani J. and Gorthi Rama Krishna Sai Subrahmanyam	Variable Patch Dictionaries for efficient Compressed Sensing based MRI Reconstruction
		35	Sukesh Adiga V. and Jayanthi Sivaswamy	Shared Encoder based Denoising of Optical Coherence Tomography images
		50	Saikat Sarkar, Amlan Chakrabarti and Dipti Prasad Mukherjee	Estimation of Ball Possession Statistics in Soccer Video
		52	Shashaank Aswatha, Vishnu Saini, Jayanta Mukherjee, Prabir Biswas, Subhas Aikat and Arundhati Misra	Unsupervised Detection of Surface Mine Sites using Sentinel Multi-spectral Imagery and Dual-polarimetric SAR Data
		59	Udit Shrivastava and Manjunath Joshi	Automated Multiclass Diagnosis of Diabetic Retinopathy using Hierarchical Learning
		76	Riki Kudo, Motoi Iwata, Masakazu Iwamura, and Koichi Kise	Improvement of Trademark Retrieval Using Pseudo Relevance Feedback
77	Kunal Chelani, Sidhartha Chitturi and Venu Madhav Govindu	Towards Automated Floorplan Generation		
12:45 - 2:00	@ Atrium	Lunch		

2:00 - 3:00	Plenary 4 @ Khemka		P. Anandan (Wadhwa AI) <i>Chair: Jayanthi Sivaswamy</i>	
3:00 - 3:20	Oral 4 (Applications , Medical) <i>Chair: Arnav Bhavsar</i> @ Khemka	27	Snehal Shete, Srikant Srinivasan, Seyed Vahid Mirnezami, Baskar Ganapathysubramanian, Patrick Schnable and Timothy Gonsalves	An automated tassel detection and trait extraction pipeline to support high- throughput field imaging of maize
3:20 - 3:40		58	Ajin Joy, and Joseph Suresh Paul	A Rapid Non-Linear Diffusion Compressed Sensing parallel MR Image Reconstruction
3:40 - 3:52		44	Harsh Jain, Chandan Nataraj and Dinesh Babu J.	Rash Driving Detection using a Frontal View Camera in Cars
3:52 - 4:04		55	Ekagra Ranjan, Soumava Paul, Siddharth Kapoor, Aupendu Kar, Ramanathan Sethuraman and Debdoot Sheet	Jointly Learning Convolutional Representations to Compress Radiological Images and Classify Thoracic Diseases in the Compressed Domain
4:05 - 5:30	@ Atrium	Tea Break		
	Poster 2 (DL + SIP; Applications, Medical) @ Atrium	Poster Session - 2		
5:30 - 6:30	Meeting @Khemka	IUPRAI General Body Meeting		
6:45 onwards	Banquet @ Khemka, Lawns	Banquet		

Day 3: 21st Dec. Venue: ISB Hyderabad

Time	Session (Theme) @Venue	Paper ID	Speaker / Author	Title
8:00 - 9:00	@ Corridor	Breakfast		
9:00 - 10:00	Plenary 5 @ Khemka		Ali Eslami (Google DeepMind) <i>Chair: Guido Gerig</i>	Neural Scene Representation and Rendering
10:00 - 10:30	@ Corridor	Tea Break		
10:30 - 10:50	Oral 5 (Learning and GANs) <i>Chair:</i> <i>Venkatesh Babu R.</i> @ Khemka	38	Sandeep Narayan Parameswaran and Sukhendu Das	A Bottom-Up and Top-Down Approach for Image Captioning using Transformer
10:50 - 11:10		47	Vignesh Prasad, Karmesh Yadav, Saurabh Singh, Swapnil Daga, Nahas Pareekutty, Madhava Krishna, Balaraman Ravindran and Brojeshwar Bhowmick	Learning to prevent Monocular SLAM failure using Reinforcement Learning
11:10 - 11:22		5	Omkar Gune, Meet Vora, Biplab Banerjee and Subhasis Chaudhuri	Zero-shot Learning using Graph Regularized Latent Discriminative Cross-domain Triplets
11:22 - 11:34		28	Saptakatha Adak and Sukhendu Das	VidSeg-GAN: Generative Adversarial Network for Video Object Segmentation Tasks
11:34 - 11:46		33	Ankush Gupta, Andrea Vedaldi and Andrew Zisserman	Learning to Read by Spelling: Towards Unsupervised Text Recognition
11:46 - 11:58		51	Arka Ujjal Dey; Gaurav Harit and A. H. Abdul Hafez	Greedy Gaussian Process Regression Applied to Object Categorization and Regression
12:00 - 12:45	Poster Highlights 5 (Learning and GANs) <i>Chairs:</i> <i>Rajbabu Velmurugan & Suresh Sundaram</i> @ Khemka	1	Adarsh Jamadandi, Sunidhi Kotturshettar and Uma Mudenagudi	PredGAN - a deep multi-scale video prediction framework for anomaly detection in videos
		3	T M Feroz Ali, Kalpesh Patel, Rajbabu Velmurugan and Subhasis Chaudhuri	Multiple Kernel Fisher Discriminant Metric Learning for Person Re-identification
		6	Akshay Dudhane; Subrahmanyam Murala and Abhinav Dhall	LEDNet: Deep Network for Single Image Haze Removal
		11	Ashish Mehta, Adithya Subramanian and Anbumani Subramanian	Learning End-to-end Autonomous Driving using Guided Auxiliary Supervision

		12	Amit More and Subhasis Chaudhuri	A Neural Network Based Approach for Geo-Localizing Events in Crowd Sourced Videos
		16	Fateme Bahri, Moein Shakeri and Nilanjan Ray	Online Illumination Invariant Moving Object Detection by Generative Neural Network
		20	Swetha V.C., Deepak Mishra and Gorthi Rama Krishna Sai Subrahmanyam	Scale and Rotation Corrected CNNs (SRC-CNNs) for Scale and Rotation Invariant Character Recognition
		26	Avishek Bhattacharjee, Samik Banerjee and Sukhendu Das	DP-GAN: Dual Pathway Generative Adversarial Network for Face Recognition in degraded scenarios
		30	Sai Ram Kasanagottu, Jayanta Mukherjee, Amit Patra and Partha Das	HSD-CNN: Hierarchically self decomposing CNN architecture using class specific filter sensitivity analysis
		34	Akshayvarun Subramanya, Konda Reddy Mopuri and Venkatesh Babu Radhakrishnan	BatchOut: Batch-level feature augmentation to improve robustness to adversarial example
		46	Rahul Roy, Susmita Ghosh and Ashish Ghosh	Salient Object Detection based on Bayesian Surprise of Restricted Boltzmann Machine
		53	Anisha Pal, Shourya Jaiswal, Swarnendu Ghosh, Nibaran Das and Mita Nasipuri	SegFast: Using Depthwise Separable Convolutions and SqueezeNet to speed up Semantic Image Segmentation
		57	Sayan Banerjee, Avik Hati, Subhasis Chaudhuri and Rajbabu Velmurugan	Image Co-segmentation using Graph Convolution Neural Network
		60	Shankar Setty, Sindhu Hegde, Supriya Satyappanavar, and Uma Mudenagudi	Evaluation of Point Cloud Categorization for Rigid and Non-Rigid 3D Objects
		69	Ankita Shukla, Shagun Uppal, Sarthak Bhagat, Saket Anand and Pavan Turaga	Geometry of Deep Generative Models for Disentangled Representations

12:45 - 2:00

@ Atrium

Lunch

2:00 - 4:00

Vision India
@ Khemka

Vision India
Chair: Parag Chaudhuri

Sl. No.	Authors	Affiliation	Title	Venue
1	Arghya Pal, Vineeth N Balasubramanian	IIT Hyderabad	Adversarial Data Programming - using GANs to Relax the Bottleneck of Curated Labeled Data	CVPR 2018
2	Rajnedra Nagar, Shanmuganathan Raman	IIT Gandhinagar	Fast and Accurate Intrinsic Symmetry Detection	ECCV 2018

3	T M Feroz Ali, Subhasis Chaudhuri	IIT Bombay	Maximum Margin Metric Learning Over Discriminative Nullspace for Person Re-identification	ECCV 2018
4	Parv Parkhiya, Rishabh Khawad, J. Krishna Murthy, Brojeshwar Bhowmick, K. Madhava Krishna	IIIT Hyderabad & TCS Labs, Kolkata	Constructing Category-Specific Models for Monocular Object-SLAM	ICRA 2018
5	Mahesh Mohan M R, A.N. Rajagopalan	IIT Madras	Divide and Conquer for Full-Resolution Light Field Deblurring	CVPR 2018
6	Ishant Shanu, Chetan Arora, S.N. Maheshwari	IIIT Delhi	Inference in Higher Order MRF-MAP Problems with Small and Large Cliques	CVPR 2018
7	Deepak Babu Sam, Neeraj N Sajjan, R. Venkatesh Babu, Mukundhan Srinivasan	IISc Bangalore	Divide and Grow: Capturing Huge Diversity in Crowd Images with Incrementally Growing CNN	CVPR 2018
8	Pritish Mohapatra, C. V. Jawahar, M. Pawan Kumar	IIIT Hyderabad	Efficient Optimization for Rank-based Loss Functions	CVPR 2018
9	Oishila Bandyopadhyay, Arindam Biswas, Bhargab B. Bhattacharya	ISI Kolkata	Bone-Cancer Assessment and Destruction Pattern Analysis in Long-Bone X-ray Image	JDI, Springer
10	Jogendra Nath Kundu, Phani Krishna Uppala, Anuj Pahuja, R. Venkatesh Babu	IISc Bangalore	Unsupervised Content Congruent Adaptation for Depth Estimation	CVPR 2018
11	Abhinav Venkat, Sai Sagar Jinka, Avinash Sharma	IIIT Hyderabad	Deep Textured 3D Reconstruction of Human Bodies	BMVC 2018
12	Ravi Kiran Sarvadevabhatla, Shiv Surya, Trisha Mittal, R. Venkatesh Babu	IISc Bangalore	Pictionary-style word-guessing on hand-drawn object sketches: dataset, analysis and deep network models	TPAMI 2018
13	Omkar Gune, Biplab Banerjee, Subhasis Chaudhuri	IIT Bombay	Structure Aligning Discriminative Latent Embedding for Zero-Shot Learning	BMVC 2018
14	Jatin Garg, Skand Vishwanath Peri, Himanshu Tolani, Narayanan.C.Krishnan	IIT Ropar	Deep Cross Modal Learning for Caricature Verification and Identification (CaVINet)	ACM-MM 2018
15	Sanchayan Santra, Ranjan Mondal, Bhabatosh Chanda	ISI Kolkata	Learning a Patch Quality Comparator for Single Image Dehazing	TIP 2018
16	Deepak Mishra, Santanu Chaudhury, Mukul Sarkar, Arvinder Singh Soin, Vivek Sharma	IIT Delhi	Ultrasound Image Segmentation: A Deeply Supervised Network with Attention to Boundaries	TIP 2018
17	Akshay Dudhane, Subrahmanyam Murala	IIT Ropar	C2MSNet: A Novel Approach for Single Image Haze Removal	WACV 2018
18	Akshay Sethi, Anush Sankaran, Naveen Panwar, Shreya Khare, Senthil Mani	IBM Bangalore	DLPaper2Code: Auto-generation of Code from Deep Learning Research Papers	AAAI 2018
19	Manoj Sharma, Anupama Ray, Santanu Chaudhury, Brejesh Lall	CEERI Pilani	A Noise-Resilient Super-Resolution framework to boost OCR performance	ICDAR 2017
20	Sankaraganesh Jonna, Sukla Satapathy, Rajiv Ranjan Sahay	IIT Kharagpur	Stereo Image De-fencing using Smartphones	ICASSP 2017
21	Prateep Bhattacharjee, Sukhendu Das	IIT Madras	Temporal Coherency based Criteria for Predicting Video Frames using Deep Multi-stage Generative Adversarial Networks	N(eur)IPS 2017
22	Francis Tom, Debdoot Sheet	IIT Kharagpur	Simulating Patho-realistic Ultrasound Images using Deep Generative Networks with Adversarial Learning	ISBI 2018
23	Vijay Rengarajan, Yogesh Balaji, A.N. Rajagopalan	IIT Madras	Unrolling the Shutter: CNN to Correct Motion Distortions	CVPR 2017
24	Parikshit Sakurikar, P. J. Narayanan	IIIT Hyderabad	Composite Focus Measure for High Quality Depth Maps	ICCV 2017

25	Ameya Prabhu, Girish Varma, Anoop M. Namboodiri	IIIT Hyderabad	Deep Expander Networks: Efficient Deep Networks from Graph Theory	ECCV 2018
26	B. Patro, V.P. Namboodiri	IIT Kanpur	Differential Attention for Visual Question Answering	CVPR 2018
27	Moneish Kumar, Vineet Gandhi, Remi Ronfard, and Michael Gleicher	IIIT Hyderabad	Zooming On All Actors: Automatic Focus+ Context Split Screen Video Generation	Eurographics 2017
4:00 - 4:15	@ Atrium	Tea Break		
4:15 - 6:00	Poster 3 (Learning and GANs) @ Atrium	Poster Session - 3		
4:15 - 7:15	Tutorial 2 @Khemka	Carlos Castillo University of Maryland	Implementing DCNNs	
4:15 - 6:00	DC @LT	Doctoral Consortium Chair: Gaurav Harit		

Day 4: 22nd Dec. Special Event: Hyderabad AI Symposium Venue: Infosys Campus Hyderabad

Time	Speaker
08:45 - 09:10	Registration and Networking
09:10 - 09:20	Opening
09:20 - 10:00	Rama Chellappa, University of Maryland
10:00 - 10:40	Guido Gerig, New York University
10:40 - 11:10	Tea Break
11:10 - 11:50	Santanu Chaudhury, IIT Jodhpur
11:50 - 12:30	Karteeek Alahari, INRIA Grenoble
12:30 - 01:10	Koichi Kise, Osaka Prefecture University
01:10 - 02:30	Lunch
02:30 - 03:10	Manohar Paluri, Facebook
03:10 - 03:50	Shailesh Kumar, Reliance Jio
03:50 - 04:30	Manmohan Chandraker, University of California, San Diego
04:30 - 05:00	High Tea and Networking



Summary of Tutorials and Workshops (18th Dec)

Event	Title	Chairs / Speakers	Timings	Venue*
Tutorial 1	Computer Vision and Navigation	Saurabh Gupta	9am - 1pm	KRB Auditorium
		Manmohan Chandraker	2pm - 5:30pm	KRB Auditorium
Tutorial 2	Matlab for ML and CV	Anand Geethagovindan	4:00pm - 6:30pm	Himalaya-104
WDH	2nd Workshop on Digital Heritage	Jayanta Mukhopadhyay	9am - 5:30pm	Himalaya 103
		S. Indu		
WCVA	3rd Workshop on Computer Vision Applications	Chetan Arora	9am - 1pm	Himalaya 104
		Kaushik Mitra		
DAR	4th Workshop on Document Analysis and Recognition	Suresh Sundaram	9am - 5:30pm	Vindhya A3-117
		Gaurav Harit		
MedImage	5th Workshop on Medical Image Processing	Suyash P. Awate	9am - 5:30pm	KRB Faculty Meeting Room
		Arnav Bhavsar		
Welcome Reception			6:30pm-8:00pm	Himalaya

- Posters will in the Exhibition Space on the ground floor of Kohli Research Block
- * Room numbers are tentative

