

## Final Schedule of CoDS-COMAD '19: January 3-5, 2019

	Day 1: January 3, 2019			Day 2: January 4, 2019			Day 3: January 5, 2019		
Time/Location	Bern I	Bern II	Bern III	Bern I	Bern II	Bern III	Bern I	Bern II	Bern III
08:30-09:00	Registration and Networking			Registration and Networking			Registration and Networking		
09:00-09:30	Coffee/Tea			Keynote #2 (Plenary): Rao Kambhampati			Keynote #3 (Plenary): Ray Mooney		
09:30-10:00	Opening remarks								
10:00-11:00	Keynote #1: Milind Tambe			Invited Talk #4: Vikas Raykar			Invited Talk #5: Joydeep Ghosh		
				Coffee break			Coffee break		
11:00-11:30	Coffee break			Research Track #2 (3)	Industry Track #2 (5)	Young Res Symposium #2 (9)	Top-Tier Conf Papers (4)	Research Track #3 (5)	Young Res Symposium #3 (10)
11:30-13:00	Demo Track (12)	Research Track #1 (5)	Young Res Symposium #1 (9)	Lunch			Lunch		
13:00-14:00	Lunch								
14:00-15:30	Ind invited	Tutorial #1: Prateek Jain		Tutorial #2: Senjuti Basu	Industry Invited Talks (3)	Tutorial #3: Chelliah et al	Keynote #4: Krishna Gummadi		
	Industry Track #1 (3)						Invited Talk #6: Soma Biswas		
15:30-16:00	Tea break			Tea break			Tea break		
16:00-16:30	Invited Talk #1: Jayant Haritsa			Tutorial #4: Nisheeth	Industry Panel		Anna Roy: NITI Aayog perspective on AI Panel: What should be India's AI strategy?		
16:30-17:00	Invited Talk #2: B Ravindran								
17:00-17:30	Invited Talk #3: Sriraam Natarajan								
17:30-18:00	Break			Break			Concluding session		
18:00-20:00	High Tea			Announcements of best papers					
	Res Track Posters (9) + YRS Posters (27) + Demo Track (12)			Talk by banquet sponsor (Flipkart) Cultural event Dinner					

Note 1: Numbers in the parentheses are the number of talks or papers to be presented.

Note 2: The booths for the sponsors will be accommodated in two smaller rooms (Zurich and Basel). They will be open throughout the conference.

## Schedule of Research Track Sessions

Research Track Oral Session RT1: Thursday, January 3, 2019, 11:30am - 01:00pm			
Session Chair: Susmita Ghosh			
Session Code	Paper ID	Authors	Title
RT1-01	25	Palash Dey, Pravesh Kothari and Swaprava Nath	The Social Network Effect on Surprise in Elections
RT1-02	105	Tanya Chowdhury and Tanmoy Chakraborty	CQASUMM: Building References for Community Question Answering Summarization Corpora
RT1-03	70	Manjira Sinha, Satarupa Guha, Preethy Verma, Tridib Mukerjee and Sandya Mannarswamy	My City, My Voice: Listening to the Citizen Views from Web Sources
RT1-04	106	Sonu Gupta, Ponnurangam Kumaraguru and Tanmoy Chakraborty	MalReG: Detecting and Analyzing Malicious Retweeter Groups
RT1-05	80	Suman Banerjee and Bithika Pal	On the Enumeration of Maximal ( $\Delta$ , $\gamma$ )-Cliques of a Temporal Network

Research Invited Talk Session: Thursday, January 3, 2019, 4:00pm - 5:30pm			
Session Chair: Shourya Roy			
Session Code	Talk ID	Authors	Title
Inv-01	Talk #1	Jayant Haritsa, IISc, Bangalore	Declarative Query Processing: The Last Frontier
Inv-01	Talk #2	Balaraman Ravindran, IIT-M, Chennai	Beyond rewards
Inv-01	Talk #3	Sriraam Natarajan, University of Texas, Dallas	Human Allied Artificial Intelligence

**Research Track Poster Session: Thursday, January 3, 2019, 06:00pm - 08:00pm**

Session Code	Paper ID	Authors	Title
Invited Poster		Jobin Wilson, Amit Meher, Bivin Vinodkumar Bindu, Manoj Sharma, Vishakha Pareek, Santanu Chaudhury and Brejesh Lall	AutoGBT: Automatically Optimized Gradient Boosting Trees for Classifying Large Volume High Cardinality Data Streams under Concept Drift (Winner of AutoML Challenge at NIPS 2018).
RTP-01	21	Gutha Jaya Krishna and Vadlamani Ravi	Feature Subset Selection using Adaptive Differential Evolution: An Application to Banking
RTP-02	23	Senthil Mani, Anush Sankaran and Rahul Aralikatte	DeepTriage: Exploring the Effectiveness of Deep Learning for Bug Triaging
RTP-03	26	Nagendra Kumar, Srikanth G, Karthik Yadav Mudda, Gayam Trishal, Anand Konjengbam and Manish Singh	Where to Post: Routing Questions to Right Community in Community Question Answering Systems
RTP-04	60	Suganya R, Vinodhini R and Rajaram S	Monitoring the growth of polycystic ovary syndrome using Mono-modal image registration technique
RTP-05	67	Athindran Ramesh Kumar, Balaraman Ravindran and Anand Raghunathan	Pack and Detect: Fast Object Detection in Videos Using Region-of-Interest Packing
RTP-06	77	Tanvi Chawla, Giridhari Singh and Emmanuel S. Pili	HyPSo: Hybrid Partitioning for Big RDF Storage and Query Processing
RTP-07	86	Rucha Tambe, Sarang Mahajan, Urmil Shah, Mohit Agrawal and Dr. Bhushan Garware	Towards designing an Automated Classification of Lymphoma Subtypes using Deep Neural Networks
RTP-08	88	R K N Sai Krishna, Tekur Chandrasekhar and Phani Arnab	RepliSmart: A Smart Replication framework for optimal query throughput in read-heavy environments
RTP-09	110	Monidipa Das and Soumya Ghosh	Space-time Prediction of High Resolution Raster Data: An Approach based on Spatio-temporal Bayesian Network (STBN)

Research Invited Talk Session: Friday, January 4, 2019, 10:00am - 10:30am			
Session Chair: Sayan Ranu			
Session Code	Talk ID	Authors	Title
Inv-02	Talk #4	Vikas Raykar, IBM Research - India	AI for fashion: Data is the new black

Research Track Oral Session RT2: Friday, January 4, 2019, 11:00am - 12:30pm			
Session Chair: Pawan Goyal, IIT-Kharagpur			
Session Code	Paper ID	Authors	Title
RT2-01	68	Pradumn Kumar Pandey, Sourangshu Bhattacharya and Niloy Ganguly	Non-link Preserving Network Embedding using Subspace Learning for Network Reconstruction
RT2-02	30	Shubhadip Mitra, Priya Saraf, Richa Sharma, Arnab Bhattacharya and Sayan Ranu	NetClus: A Scalable Framework to Mine Top-K Locations for Placement of Trajectory-Aware Services
RT2-03	36	Ahsaas Bajaj, Hemant Tiwari and Vanraj Vala	Enhanced Learning to Rank using Cluster-loss Adjustment
RT2-04	53	Naresh Manwani	PRIL: Perceptron Ranking Using Interval Labels
RT2-05	33	Vinay Ms and Jayant R. Haritsa	Root Rank: A Relational Operator for KWS Result Ranking

**Research Invited Talk Session: Saturday, January 5, 2019, 10:00am - 10:30am**

Session Chair: Niloy Ganguly

Session Code	Talk ID	Authors	Title
Inv-03	Talk #5	Joydeep Ghosh, University of Texas, Austin	Learning from aggregated data

**Top-Tier Conference Paper Session: Saturday, January 5, 2019, 11:00am - 12:30pm**

Session Chair: Soma Biswas

Session Code	Paper ID	Presenter	Citation
RT3-01	16	Vinay Kumar Verma	Vinay Kumar Verma, Gundeep Arora, Ashish Mishra, Piyush Rai; "Generalized Zero-Shot Learning via Synthesized Examples," The IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018, pp. 4281-4289
RT3-02	38	Bidisha Samanta	Bidisha Samanta, Abir De, Gourhari Jana, Pratim Kumar Chattaraj, Niloy Ganguly, Manuel Gomez Rodriguez(MPI-SWS) "NeVAE: A Deep Generative Model for Molecular Graphs" accepted in AAAI 2019.
RT3-03	72	Madhav Nimishakavi	Madhav Nimishakavi, Pratik Jawanpuria and Bamdev Mishra. A Dual Framework for Low-rank Tensor Completion. Advances in Neural Information Processing Systems 2018.
RT3-04	8	Palash Dey	Palash Dey, Resolving Computational Complexity of Some Fundamental Problems in Computational Social Choice, PhD Thesis, Dept. of Computer Science and Automation, Indian Institute of Science, Supervisors: Prof. Y. Narahari and Prof. Arnab Bhattacharyya, 2017. (ACM Dissertation Award)

<b>Research Track Oral Session RT3: Saturday, January 5, 2019, 11:00am - 12:30pm</b>			
Session Chair: Ansuman Banerjee, Indian Statistical Institute, Kolkata			
<b>Session Code</b>	<b>Paper ID</b>	<b>Authors</b>	<b>Title</b>
RT3-01	16	Sumit Soman and Jayadeva Prof	Learning from Low Training Data using Classifiers with Derivative Constraints
RT3-02	38	Mandikal Vikram, A Aditya, Suhas B S and Sowmya Kamath	An Approach for Multi-modal Medical Image Retrieval using Latent Dirichlet Allocation
RT3-03	72	Vasudha Todi, Gunjan Sengupta and Sourangshu Bhattacharya	Probabilistic Path Planning using Obstacle Trajectory Prediction
RT3-04	8	Angshul Majumdar	Deeply Coupled Graph Structured Autoencoder for Domain Adaptation
RT3-05	121	Rahul Garg, Chayan Sharma, Aashish Nagpal and Pawan Kumar	Near-Separable Non-negative Matrix Factorization Using L1-Optimization

<b>Invited Talk Session: Saturday, January 5, 2019, 3:00pm - 3:30pm</b>			
Session Chair: Arnab Bhattacharya			
<b>Session Code</b>	<b>Talk ID</b>	<b>Authors</b>	<b>Title</b>
Inv-04	Talk #6	Soma Biswas, Indian Institute of Science, Bangalore	Cross-modal matching

## Schedule of Industry Track Sessions

Industry Track Session IT1: Thursday, January 3, 2019, 2:00pm - 3:30pm			
Session Chair: Anush Sankaran			
Session Code	Paper ID	Authors	Title
IT-INV1		Nitendra Rajput	Invited Talk: The Psychology of Deep Learning in Decision Making
IT1-01	99	Asha Subramanian, Pavan Kumar Raichur Rajoli, Manikanta Vikkurthi and Pier Luigi Buttigieg	Semantic Harmonisation of Numeric Data from Open Government Data
IT1-02	31	Sudhir Verma and Uma Rani T M	Intelligent Correction Predictor
IT1-03	37	Nidhi Saraswat, Ishan Verma and Viren Gupta	Catch-phrase based Document Representation for Improved Prior Art Search

Industry Track Session IT2: Friday, January 4, 2019, 11:00am - 12:30pm			
Session Chair: Vasudeva Varma			
Session Code	Talk ID	Authors	Title
IT2-01	45	Rekha Singhal, Gautam Shroff, Mukund Kumar, Sharod Roy Choudhury, Sanket Kadarkar, Rupinder Virk, Siddharth Verma and Vartika Tewari	Fast Online 'Next Best Offers' using Deep Learning
IT2-02	64	Shalmoli Ghosh, Koustav Rudra, Saptarshi Ghosh, Niloy Ganguly, Sanjay Podder, Naveen Balani and Neville Dubash	Identifying Multi-dimensional Information from Microblogs During Epidemics
IT2-03	11	Sushravya G M and Shubhashis Sengupta	Unsupervised Multi-task Learning Dialogue Management
IT2-04	104	Rahul Kulhalli, Chinmay Savadikar and Bhushan Garware	A Hierarchical Approach to Skin Lesion Classification
IT2-05	69	Neelamadhav Gantayat, Diptikalyan Saha, Jaydeep Sen and Senthil Mani	Goal-based Ontology Creation for NLQ in SAP-ERP Platform

<b>Industry Track Invited Talks Session IT3: Friday, January 4, 2019, 2:00pm - 3:30pm</b>			
Session Chair: Balaji Vasani Srinivasan			
<b>Session Code</b>	<b>Paper ID</b>	<b>Authors</b>	<b>Title</b>
IT-INV2		Vivek Tyagi	Invited Talk: Design and Analysis of High Performance Convolutional Neural Network Text Classifier and its Discriminative Sequence Learning Capability
IT-INV3		Monojit Choudhury	Invited Talk: Processing Code-mixed Language
IT-INV3		Arijit Biswas	Invited Talk: Representation Learning for E-commerce

<b>Industry Track Panel Discussion: Friday, January 4, 2019, 4:00pm - 5:30pm</b>			
Session Chair: Nanda Khambatla (Moderator)			
<b>Session Code</b>	<b>Talk ID</b>	<b>Authors</b>	<b>Title</b>
IT-PNL		Aruna Rajan, Karthik Sankaranarayanan, Subhajit Sanyal, Krishnamurthy Vaidyanathan	Panel: Challenges in developing and deploying AI/ML solutions at scale in industry



## Schedule of Young Researchers' Symposium Sessions

Session YRS1: Thursday, January 3, 2019, 11:30am - 01:00pm			
Session Chair: Sourangshu Bhattacharya			
Session Code	Paper ID	Authors	Title
YRS1-01	143	Ariyam Das and Manoj Reddy Dareddy.	A "Poker-Styled" On-Device Selective Privacy Preserving Framework for Recommender Systems
YRS1-02	177	Abhisek Chakrabarty, Akshay Chaturvedi and Utpal Garain. CNN-based Context Sensitive Lemmatization	CNN-based Context Sensitive Lemmatization
YRS1-03	206	Swapnil Gandhi and Yogesh Simmhan.	From "Think Like a Vertex" to "Think Like an Interval"
YRS1-04	181	Abhinav Sarkar, Swagata Roy and Moumita Basu.	Curating Resource Needs and Availabilities from Microblog During a Natural Disaster: A Case Study on the 2015 Chennai Floods
YRS1-05	203	Abhisek Dash.	Can We Escape the "Originals"?
YRS1-06	187	Aparup Khatua, Erik Cambria, Kuntal Ghosh, Nabendu Chaki and Apalak Khatua.	Tweeting in Support of LGBT? A Deep Learning Approach
YRS1-07	188	Bijoly Saha Bhattacharya.	Quality Enhancement in Crowdsourcing
YRS1-08	209	Abhijeet Awasthi and Sunita Sarawagi.	Continual Learning with Neural Networks: A Review
YRS1-09	141	Abhijeet Dubey, Aditya Joshi and Pushpak Bhattacharyya.	Deep Models for Converting Sarcastic Utterances into their Non Sarcastic Interpretation

YRS Poster Session: Thursday, January 3, 2019, 06:00pm - 08:00pm	
Posters of all accepted YRS track papers will be presented here	

**Session YRS2: Friday, January 4, 2019, 11:00am - 12:30pm**

Session Chair: Sanjay Saha

Session Code	Paper ID	Authors	Title
YRS2-01	149	Manjari Pradhan and Bhargab Bhattacharya.	A Prufer-Sequence Based Representation of Large Graphs for Structural Encoding of Logic Networks
YRS2-02	166	Indu John and Shalabh Bhatnagar	Efficient Budget Allocation and Task Assignment in Crowdsourcing
YRS2-03	162	Santosh Tokala Yaswanth Sri Sai, Srijan Bansal, Avirup Saha and Niloy Ganguly.	Can Siamese Networks help in stance detection?
YRS2-04	175	Dinesh Kumar Pradhan, Joyita Chakraborty and Subrata Nandi.	Applications of Machine Learning in Analysis of Citation Network
YRS2-05	205	Akash Anil, Shubham Singhal, Piyush Jain, Sanasam Ranbir Singh, Ajay Ladhar, Sandeep Singh and Uppinder Chugh.	Network Sampling Using k-hop Random Walks for Heterogeneous Network Embedding
YRS2-06	208	Roshni Chakraborty and Joydeep Chandra.	Analyzing Interaction Dynamics in Social Networks through Social Yield
YRS2-07	158	Rohit Kumar.	Channel Selection in Dynamic Networks of Unknown Size
YRS2-08	168	Suman Banerjee, Mamata Jenamani and Dilip Pratihar.	Maximizing the Earned Benefit in an Incentivized Social Networking Environment: An Integer Programming-Based Approach
YRS2-09	139	Braznev Sarkar.	Big Streaming Graph Analysis

**Session YRS3: Saturday, January 5, 2019, 11:00am - 12:30pm**

Session Chair: Kuntal Ghosh

Session Code	Paper ID	Authors	Title
YRS3-01	150	Diptesh Kanojia, Pushpak Bhattacharyya, Malhar Kulkarni and Gholemreza Haffari.	Cognate Identification to improve Phylogenetic trees for Indian Languages
YRS3-02	163	Santosh Tokala Yaswanth Sri Sai, Aravind K.V.S and Niloy Ganguly.	Hate Speech Detection in Hindi-English Code-Mixed Social Media Text
YRS3-03	182	Ishani Mondal, Sudeshna Sarkar and Pawan Goyal.	Challenges of coreference resolution in biomedical text and experimenting with the biological entities
YRS3-04	157	Girthana K and Swamynathan S.	Query Oriented Extractive-Abstractive Summarization System (QEASS)
YRS3-05	49	Surabhi Nath, Dyutiman Mukhopadhyay and Krishna Miyapuram.	Emotive Stimuli-triggered Participant-based Clustering Using a Novel Split-and-Merge Algorithm
YRS3-06	122	Kritik Soman.	Rooftop Detection using Aerial Drone Imagery
YRS3-07	164	Soumya Suvra Ghosal.	Travel Time Prediction of Taxis using Tensor Factorization
YRS3-08	174	Geetika Arora, Tanvi Aggarwal and Kamlesh Tiwari.	Softmax Coaxial Gaussian Track Code for Fingerprint Indexing
YRS3-09	202	Ameet Deshpande and Monisha Jegadeesan.	Leveraging Ontological Knowledge for Neural Language Models

## Schedule of Demo Track Session

**Session DT1: Thursday, January 3, 2019, 11:30AM - 01:00PM**

Session Code	Paper ID	Authors	Title
DT-01	6	Ankush Chatterjee, Umang Gupta, Meghana Joshi, Sonam Damani, Kedhar Nath Narahari, Khyatti Gupta, Nitya Raviprakash and Puneet Agrawal	<a href="#">How can Chatbots Understand Emotions?</a>
DT-02	138	Sukalyan Bhakat and Ganesh Ramakrishnan	<a href="#">Anomaly Detection in Surveillance Videos</a>
DT-03	160	Sujoy Roychowdhury, Sapna ., Khyati Baradia, Ria Chakraborty, Tanveer Khan and Anagha M	<a href="#">Recommendence and Fashionsence - Online Fashion Advisor for Offline Experience</a>
DT-04	193	Himanshu Bhatt, Shourya Roy, Di Xu, Lokesh Bhatnagar, Chetan Lohani and Vinit Jain	<a href="#">Digital Auditor: A framework for detecting duplicate invoices</a>
DT-05	183	Shelly Sachdeva, Wanming Chu and Subhash Bhalla	<a href="#">Relational-like Query Language for Archetypes in Standardized Electronic Health Records Databases</a>
DT-06	137	Bakhtiyar Syed, Raghuram Vadapalli, Nishant Prabhu, Balaji Vasan Srinivasan and Vasudeva Varma	<a href="#">When science journalism meets artificial intelligence : An interactive demonstration</a>
DT-07	140	Nisarg Jhaveri, Manish Gupta and Vasudeva Varma	<a href="#">clstk: The Cross-lingual Summarization Tool-kit</a>
DT-08	167	Vatun Natu and Rahul Ghosh	<a href="#">EasyDist: An End-to-End Distributed Deep Learning Tool for Cloud</a>
DT-09	169	Vani Mandava	<a href="#">Open data using Cloud infrastructure</a>
DT-10	165	Mayank Meghwanshi, Pratik Jawanpuria, Anoop Kunchukuttan, Hiroyuki Kasai and Bamdev Mishra	<a href="#">McTorch, a manifold optimization library for deep learning</a>
DT-11	159	Anupam Sanghi, Raghav Sood, Dharmendra Singh, Jayant Haritsa and Srikanta Tirthapura	<a href="#">HYDRA: A Dynamic Big Data Regenerator</a>
DT-12	161	Ayan Dey, Rahul Dutta, Sukriti Bhattacharya and Nabendu Chaki	<a href="#">Shellmark: A Robust Software Watermarking Tool</a>