# **ACM CoDS-COMAD 2018**

Goa University, Goa

11<sup>th</sup> - 13<sup>th</sup> Jan 2018

(Conference Schedule)

	Day 1: 11 <sup>th</sup> Jan 2018
	MANDOVI
09:00 - 9:15	Opening Remarks by General Chairs (GC) and Program Chairs (PC)
9:15 – 10:30	Keynote Address by Surajit Chaudhury, Distinguished Scientist, Microsoft Research, Redmond Title: Big Data and the Cloud: Implications for Structured Data Management Session Chair: Sunita Sarawagi, IIT Bombay
10:30 -11:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
11:00 - 12:30	<ul> <li>Research Track 1 Session Chair: Arun Rajkumar, Conduent Labs India</li> <li>Sudarsun Santhiappan, Jeshuren Chelladurai and Ravindran Balaraman. A novel topic modeling based weighting framework for class imbalance learning</li> <li>Adepu Ravi and Vineeth Balasubramanian. Are Saddles good enough for Neural Networks</li> <li>Puja Sahu and Nandyala Hemachandra. Some new PAC-Bayesian bounds and their use in selection of regularization parameter for linear SVMs Vishwak Srinivasan,</li> <li>Adepu Ravisankar and Vineeth Balasubramanian. ADINE: An Adaptive Momentum Method for Stochastic Gradient Descent</li> <li>Sandhya Tripathi and Nandyala Hemachandra. Scalable linear classifiers based on exponential loss function</li> </ul>
12:30 - 14:00	LUNCH @ RESTAURANT / SHAMIANA – Poster @ SHAMIANA
14:00 - 16:00	<ul> <li>Session Chair - Manish Gupta, VideoKen</li> <li>S. Sudarshan, IIT Bombay, XData: Testing and Grading SQL Queries</li> <li>Anshumali Shrivastava, Rice University, Hashing Algorithms for Extreme-Scale Deep Learning</li> <li>Saptarshi Ghosh, IIT Kharagpur, Utilizing Online Social Media for Post-Disaster Relief</li> <li>Mausam, IIT Delhi, How to Crowdsource the Best Training Data in a Budget-Constrained Setting?</li> </ul>
16:00 - 16:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
16:30 - 18:00	Tutorial: Data Management Challenges in Production Machine Learning by Sudeep Roy, Google, USA Session Chair: Niloy Ganguly, IIT Kharagpur

	Day 1: 11 <sup>th</sup> Jan 2018
	ZUARI
9:00 – 9:15	Relay of opening remarks by GC and PC from Room 1 MANDOVI
9:15 - 10:30	Relay of Keynote Address by Surajit Chaudhury from Room 1 MANDOVI
10:30 -11:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
11:00 - 12:30	<ul> <li>Gurkirat Singh, Dhawal Upadhyay and Medha Atre. Efficient RDF Dictionaries with B+ Trees</li> <li>Prateeti Mohapatra, Anupama Ray and Gargi Dasgupta. FuTSe: A Fuzzy Taxonomy Service to Facilitate Product Search</li> <li>Yogalakshmi Jayabal, Chandrashekar Ramanathan and Santhanagopalan Rajagopalan. HDSAnalytics: A Data Analytics Framework for Heterogeneous Data Sources</li> <li>Malay Bhattacharyya and Sankar Kumar Mridha. Studying the Influence of Requesters in Posted-price Crowdsourcing</li> <li>Madhulika Mohanty and Maya Ramanath. KlusTree: Clustering Answer Trees from Keyword Search on Graphs</li> </ul>
12:30 - 14:00	LUNCH @ RESTAURANT / SHAMIANA
14:00 - 16:00	Relay of Invited Talks – 1 from Room 1 MANDOVI
16:00 - 16:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
16:30 - 18:00	Relay of Tutorial: Data Management Challenges in Production Machine Learning from Room 1 MANDOVI

	Day 1: 11 <sup>th</sup> Jan 2018
	ABOLIM
09:00 - 9:15	Relay of opening remarks by GC and PC from Room 1 MANDOVI
09:15-10:30	Relay of Keynote Address by Surajit Chaudhury from Room 1 MANDOVI
10:30 -11:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
	Young Researchers' Symposium Session Chair: Pawan Goyal, IIT Kharagpur
11:00 - 12:30	Crowdsourcing:  1. Shankar Kumar Mridha. Network based Mechanisms for Competitive Crowdsourcing  2. Pramit Mazumdar. Handling Cold-start Scenarios in Point-of-Interest Recommendations Through Crowdsourcing  Data Preprocessing:  1. Subhashree S. Enriching Domain Ontologies using Question-Answer Datasets  2. Rajeev Iriny. Semantic similarity measure for predicates in Knowledge Graphs  3. Shikha Gupta. Deep CNN based Pseudo-concept Selection and Modeling for Generation of Semantic Multinomial Representation of Scene Images  4. Pradnya Bhagat. A Comparative Study of Feature Extraction Methods from User Reviews for Recommender Systems  ML:  1. Sanatan Sukhija. Label Space Driven Feature Space Remapping
	<ol><li>Ashthika Balakrishnan. Online Learning Isotonic Separation for the study of large-scale data</li></ol>

	Day 1: 11 <sup>th</sup> Jan 2018 Lawn 1
09:00 – 9:15	Relay of opening remarks by GC and PC from Room 1 MANDOVI
9:15 – 10:30	Relay of Keynote Address by Surajit Chaudhury from Room 1 MANDOVI

# Day 1: 11<sup>th</sup> Jan 2018 Lawn 2

#### Demos

Session Chair - Moumita Sinha, Adobe Labs

#### Invited Demos:

Anoop Kunchukuttan, IIT Bombay | Ratish Puduppully, IIIT Hyderabad | Pushpak Bhattacharyya, IIT Bombay

Brahmi-Net: A transliteration and script conversion system for languages of the Indian subcontinent.

Abhijnan Chakraborty | Bhargavi Paranjape | Sourya Kakarla | Niloy Ganguly, IIT Kharagpur

Stop Clickbait: Detecting and Preventing Clickbaits in Online News Media.

Anupam Sanghi | Dharmendra Kumar Singh, IISc Bangalore

CODD: A Dataless Approach to Big Data Testing.

### **Contributory Demos:**

Pooja Agrawal | K. Venkatesh Emani | Souvik Pal | S. Sudarshan,

### 16:30 - 18:00

DBridge: Optimizing Data Access in ORM Applications

Abhay Prakash | Kedhar Nath Narahari | Khyatti Gupta | Meghana Joshi | Nitya Raviprakash, Sonam Damani | Umang Gupta

Chatbot for human-like conversations built using Convolutional Neural Network based IR

T Santosh Debarshi | Kumar Sanyal | Plaban Kumar Bhowmick, Surrogator: Enriching a Digital Library with Open Access Surrogates

Raksha Pavagada Subbanarasimha, IIIT - B | Lokesh Todwal, LNMIIT | Mamillapalli Rachana | Aditya Naidu | Srinath Srinivasa,

Mithya: A Framework For Identifying Opinion Drivers On Social Media

Shreya Khare | Naveen Panwar | Akshay Sethi | Anush Sankaran | Senthil Mani | Rahul Aralikatte | Neelamadhav Gantayat.

DARVIZ: A Visual IDE to build Deep Learning Models

# Day 1: 11<sup>th</sup> Jan 2018 Shamiana

10:30 -11:00 12:30 - 14:00 16:00 - 16:30

POSTERS of Research Track 1, 2, 3

	List of Research Papers - Posters for Display
1.	A novel topic modeling based weighting framework for class imbalance learning
2.	Are Saddles good enough for Neural Networks
3.	Some new PAC-Bayesian bounds and their use in selection of regularization parameter for linear SVMs
4.	ADINE: An Adaptive Momentum Method for Stochastic Gradient Descent
5.	Scalable linear classifiers based on exponential loss function
6.	Efficient RDF Dictionaries with B+ Trees
7.	FuTSe: A Fuzzy Taxonomy Service to Facilitate Product Search
8.	HDSAnalytics: A Data Analytics Framework for Heterogeneous Data Sources
9.	Studying the Influence of Requesters in Posted-price Crowdsourcing
10.	KlusTree: Clustering Answer Trees from Keyword Search on Graphs
11.	Product Discovery From E-Commerce Listings via Deep Text Parsing
12.	Syncretic Matching: Story Similarity Between Documents
13.	Unsupervised Stance Classification in Online Debates
14.	Stance Classification of Multi-Perspective Consumer Health Information
15.	Believe It or Not! Identifying Bizarre News in Online News Media

	Day 2: 12 <sup>th</sup> Jan 2018
	MANDOVI
09:00–10:10	Keynote Address - Anima Anandkumar, Principal scientist at Amazon Web Services & Endowed Professor at Caltech.  Title: Large-scale Machine Learning- Deep, Distributed and Multi-Dimensional Session Chair: Shourya Roy, American Express Big Data Labs
10:10-10:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
	Industry Track 1: Session Chair: Prasad Deshpande,Kena Labs Panel Discussion (1 Hour): Deep Learning: Hype vs Reality Moderator: Prasad Deshpande,Kena Labs
10:30-12:45	Speakers: Gaurav Aggarwal, Ola Labs; Krishnendu Chaudhury, Drishti Technologies, Rajeev Rastogi, Amazon; Sunita Sarawagi, IIT Bombay
	<ul> <li>Invited talks:</li> <li>Praveen Jayachandran, Research Staff Member, IBM Research, India Data and Analytics Challenges in a blockchain world.</li> <li>Sharan Raman, Director of Software Development (Database) at Oracle Oracle Autonomous Database Cloud.</li> <li>Sreenath Maikkara, Surveillance Analytics Group, Goldman Sachs Large scale</li> </ul>
12:30-14:00	Named Entity Recognition in emails  LUNCH @ RESTAURANT / SHAMIANA
14:00 -15:30	Industry Track 2: Session Chair: Mayur Datar, Flipkart Invited Speaker: Zainul Charbiwala, Co-Founder and CTO at Tricog Health How We Built Our Machine Intelligence To Help Doctors Save Lives  Contributory Talks:  Ishan Sohony Rameshwar Pratap, Ullas Nambiar. Ensemble Learning for Credit Card Fraud Detection Gauri Shah, Aashis Tiwari. Anomaly Detection in IIoT: A Case Study using Machine Learning Chinnappa Guggilla, Ankit G Pandey, Krishna Kummamuru, Madhura Shivaram. Mining Entities and their Values from Semi-Structured Documents in Business Process Outsourcing
15:30-16:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
16:00- 17:30	<ul> <li>Tutorial: Influence Maximization</li> <li>Akhil Arora, American Express Big Data Labs, Bangalore</li> <li>Sainyam Galhotra, University of Massachusetts, Amherst, USA</li> <li>Sayan Ranu, IIT Delhi</li> <li>Shourya Roy, American Express Big Data Labs, Bangalore</li> <li>Session Chair: Moumita Sinha, Adobe Labs</li> </ul>

	Day 2: 12 <sup>th</sup> Jan 2018
	ZUARI
09:00-10:10	Relay of Keynote Address - Anima Anandkumar from Room 1 MANDOVI
10:10 -10:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
10:30 -12:30	Relay of Industry Track – 1 Room 1 MANDOVI
12:30 -14:00	LUNCH @ RESTAURANT / SHAMIANA
14:00 -15:30	<ul> <li>Research Track - 3</li></ul>
15:30- 16:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
16:00 -17:30	Tutorial: Adversarial Machine Learning

	Day 2: 12 <sup>th</sup> Jan 2018	
	Lawn 1	
09:00-10:10	Relay of Keynote Address - Anima Anandkumar from Room 1 MANDOVI	
17:30-17:45	ACM / ACM-W Event Maria Choudhary, Oracle Council Member, ACM India	

	Day 2: 12 <sup>th</sup> Jan 2018
	ABOLIM
09:00- 10.10	Relay of Keynote Address - Anima Anandkumar from Room 1 MANDOVI
10:10 -10:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
10.30 -12.30	<ul> <li>Young Researchers' Symposium Session Chair: Amit Awekar, IIT Guwahati Applications:         <ol> <li>Shubhada Deshmukh. Feedback based real time facial and head gesture recognition for e-learning system</li> <li>Deepali Joshi. Mental health analysis using deep learning for feature extraction</li> <li>Saurabh Singh Thakur. A Mobile App based Smoking Cessation Assistance using Automated detection of Smoking Behavior</li> <li>Shubhashri Govindarajan. LAWBO:A Smart Lawyer Chatbot</li> <li>Krati Gupta. Mitotic v/s non-mitotic HEp-2 cells classification for CAD based Auto-Immune Disorder detection: A study using CNN</li> </ol> </li> <li>Data Management         <ol> <li>Anupam Sanghi. HYDRA: Database Regenerator</li> <li>Sarvesh Pandey. Priority Inversion in DRTDBS: Challenges and Resolutions</li> <li>Gajanan Gawde. Similarity Search of Time Series Trajectories based on Shape</li> </ol> </li> <li>Machine Learning         <ol> <li>Aditya Asgaonkar. Is the Cost of Proof-of-Work Consensus Quasilinear?</li> <li>Arun Verma. Unsupervised Cost Sensitive Predictions with Side Information</li> <li>Srinka Basu. Identifying consensus block structures in multi-relational network</li> </ol> </li> </ul>
12:30 -14:00	LUNCH @ RESTAURANT / SHAMIANA
14:00 -15:30	<ul> <li>Research Track – 4</li> <li>Session Chair: Balaji Vasan, Adobe Labs</li> <li>Raghu Krishnapuram, Arun Rajkumar, Adithya Acharya, Nikhil Dhara, Manjunath Goudar and Akshay Sarashetti. Online Domain Adaptation by Exploiting Labeled Features and Pro-active Learning</li> <li>Sanatan Sukhija, Narayanan C Krishnan and Deepak Kumar. Supervised Heterogeneous Transfer Learning using Random Forests</li> <li>Sakti Saurav, Pankaj Malhotra, Vishnu Tv, Narendhar Gugulothu, Lovekesh Vig, Puneet Agarwal and Gautam Shroff. Online Anomaly Detection with Concept Drift Adaptation using Recurrent Neural Networks</li> <li>Devendra Kumar Luna, Girish Palshikar, Manoj Apte and Arnab Bhattacharya. Finding Shell Company Accounts using Anomaly Detection</li> <li>Karamjit Singh, Garima Gupta, Vartika Tewari and Gautam Shroff. Comparative Benchmarking of Causal Discovery Algorithms</li> </ul>

	Day 2: 12 <sup>th</sup> Jan 2018	
	Shamiana	
10:30 -11:00	POSTERS of Young Researchers' Symposium (YRS)	
12:30 - 14:00	POSTERS OF Toding Researchers Symposium (Tris)	
16:00 - 16:30		

	List of YRS Papers - Posters for Display
1.	Network based Mechanisms for Competitive Crowdsourcing.
2.	Handling Cold-start Scenarios in Point-of-Interest
	Recommendations Through Crowdsourcing
3.	Enriching Domain Ontologies using Question-Answer Datasets.
4.	Semantic similarity measure for predicates in Knowledge Graphs.
	Deep CNN based Pseudo-concept Selection and Modeling for
5.	Generation of Semantic Multinomial Representation of Scene
	Images.
6.	A Comparative Study of Feature Extraction Methods from User
	Reviews for Recommender Systems.
7.	Label Space Driven Feature Space Remapping
8.	Online Learning Isotonic Separation for the study of large-scale
	data
9.	Feedback based real time facial and head gesture recognition for e-
	learning system
10.	Mental health analysis using deep learning for feature extraction
11.	A Mobile App based Smoking Cessation Assistance using
	Automated detection of Smoking Behavior
12.	LAWBO:A Smart Lawyer Chatbot
13.	Mitotic v/s non-mitotic HEp-2 cells classification for CAD based
	Auto-Immune Disorder detection: A study using CNN
14.	HYDRA: Database Regenerator
15.	Priority Inversion in DRTDBS: Challenges and Resolutions
16.	Similarity Search of Time Series Trajectories based on Shape
17.	Is the Cost of Proof-of-Work Consensus Quasilinear?
18.	Unsupervised Cost Sensitive Predictions with Side Information
19.	Identifying consensus block structures in multi-relational network

	Day 3: 13 <sup>th</sup> Jan 2018
9:00 – 10:10	Keynote Address - Manik Varma, Principal Researcher, Microsoft Research India & Adjunct Professor of Computer Science, IIT Delhi Title: The Extremes of Machine Learning Session Chair: Niloy Ganguly, IIT Kharagpur
10:10 - 10:30	TEA/COFFEE @ RESTAURANT / SHAMIANA
10:30 -12:30	Session Chair - Balaraman Ravindran, IIT Madras     Medha Atre, CSE, IIT Kanpur, Handling the Big Data – Scalability     Challenges and Solutions     Chiranjib Bhattacharyya, IISc Bangalore, OWL to the rescue of LASSO     Mitesh Khapra, CSE, IIT Madras, Diversity driven Attention Model for Query-based Abstractive Summarization     Arnab Nandi, CSE, The Ohio State University, Querying Beyond Keyboards
12:30 - 14:00	LUNCH @ RESTAURANT / SHAMIANA
14:00 - 15:30	Tutorial: Knowledge Extraction and Inference from Text • Soumen Chakrabarti, IIT Bombay  Session Chair: Sayan Ranu, IIT Delhi
15:30 - 16:00	TEA/COFFEE @ RESTAURANT / SHAMIANA
	Reseach Track - 5 Session Chair: Sayan Ranu, IIT Delhi
16:00 - 17:30	<ul> <li>Supriya Pandhre, Himangi Mittal, Manish Gupta and Vineeth N Balasubramanian. STWalk: Learning Trajectory Representations in Temporal Graphs</li> <li>Amol Dumrewal, Anwesh Basu, Shubham Atreja, Prateeti Mohapatra, Pooja Aggarwal and Gargi B. Dasgupta. CitiCafe: Conversation-Based Intelligent Platform for Citizen Engagement</li> <li>Swati Agarwal, Nitish Mittal and Ashish Sureka. Potholes and Bad Road Conditions- Mining Twitter to Extract Information on Killer Roads</li> <li>Abhinav Agarwalla, Arnav Kumar Jain and Kv Manohar. Bayesian Optimisation with Prior Reuse for Motion Planning in Robot Soccer</li> <li>Rushikesh Nalla, Rajdeep Pinge, Manish Narwaria and Bhaskar Chaudhury. Priority Based Functional Group Identi⊡cation of Organic Molecules using Machine Learning</li> </ul>

Day 3: 13 <sup>th</sup> Jan 2018			
	ZUARI		
9:00 – 10:10	Relay of Keynote Address by Manik Varma from Room 1 MANDOVI		
10:10 - 10:30	TEA/COFFEE @ RESTAURANT / SHAMIANA		
10:30 -12:30	Relay of Invited Talks – 3 from ROOM 1 MANDOVI		
12:30 - 14:00	LUNCH @ RESTAURANT / SHAMIANA		
14:00-15:30	Relay of Tutorial: Knowledge Extraction and Inference from Text from ROOM 1 MANDOVI		
15:30 - 16:00	TEA/COFFEE @ RESTAURANT / SHAMIANA		
16:00 - 17:30	<ul> <li>Reseach Track - 6 Session Chair: Mitesh Khapra, IIT Madras</li> <li>Chandramohan T N and Balaraman Ravindran. A Neural Attention Based Approach for Clickstream Mining</li> <li>Milan Someswar and Arnab Bhattacharya. MineAr: Using Crowd Knowledge for Mining Association Rules in the Health Domain</li> <li>Rahul Aralikatte, Giriprasad Sridhara, Neelamadhav Gantayat and Senthil Mani. Fault in your stars: An Analysis of Android App Reviews</li> <li>Rama Syamala Sreepada, Bidyut Kr. Patra, Avijit Chakrabarty and Satyadev Chandak. Revisiting Tendency based Collaborative Filtering for Personalized Recommendations</li> <li>Rahul Wadbude, Vivek Gupta, Dheeraj Mekala and Harish Karnick. User Bias Removal in Review Score Prediction</li> </ul>		
17:30- 17:45	Relay of Closing remarks by GC and PC from Room 1 MANDOVI		

Day 3: 13 <sup>th</sup> Jan 2018		
Lawn 1		
9:00 – 10:10	Relay of Keynote Address by Manik Varma from Room 1 MANDOVI	

Day 3: 13 <sup>th</sup> Jan 2018		
ABOLIM		
9:00 - 10:10	Relay of Keynote Address by Manik Varma from Room 1 MANDOVI	

# Day 3: 13<sup>th</sup> Jan 2018 Lawn 2

### **Demos**

Session Chair - Moumita Sinha, Adobe Labs

### **Invited Demos:**

Anoop Kunchukuttan, IIT Bombay | Ratish Puduppully, IIIT Hyderabad | Pushpak Bhattacharyya, IIT Bombay

Brahmi-Net: A transliteration and script conversion system for languages of the Indian subcontinent.

Abhijnan Chakraborty | Bhargavi Paranjape | Sourya Kakarla | Niloy Ganguly, IIT Kharagpur

Stop Clickbait: Detecting and Preventing Clickbaits in Online News Media.

Anupam Sanghi | Dharmendra Kumar Singh, IISc Bangalore

CODD: A Dataless Approach to Big Data Testing.

## **Contributory Demos:**

Pooja Agrawal | K. Venkatesh Emani | Souvik Pal | S. Sudarshan,

## 14:00 - 15:30

DBridge: Optimizing Data Access in ORM Applications

Abhay Prakash | Kedhar Nath Narahari | Khyatti Gupta | Meghana Joshi | Nitya Raviprakash, Sonam Damani | Umang Gupta

Chatbot for human-like conversations built using Convolutional Neural Network based IR

T Santosh Debarshi | Kumar Sanyal | Plaban Kumar Bhowmick,

Surrogator: Enriching a Digital Library with Open Access Surrogates

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Mithya: A Framework For Identifying Opinion Drivers On Social Media

Shreya Khare | Naveen Panwar | Akshay Sethi | Anush Sankaran | Senthil Mani | Rahul Aralikatte | Neelamadhay Gantayat.

DARVIZ: A Visual IDE to build Deep Learning Models

Day 3: 13 <sup>th</sup> Jan 2018 Shamiana	
10:30 -11:00	POSTERS of Research Track 4, 5, 6
12:30 - 14:00	FOSTERS OF RESearch Hack 4, 5, 0
16:00 - 16:30	

List of Research Papers - Posters for Display		
1.	Online Domain Adaptation by Exploiting Labeled Features and Pro-	
1.	active Learning	
2.	Supervised Heterogeneous Transfer Learning using Random Forests	
3.	Online Anomaly Detection with Concept Drift Adaptation using	
J.	Recurrent Neural Networks	
4.	Finding Shell Company Accounts using Anomaly Detection	
5.	Comparative Benchmarking of Causal Discovery Algorithms	
6.	STWalk: Learning Trajectory Representations in Temporal Graphs	
7.	CitiCafe: Conversation-Based Intelligent Platform for Citizen	
7.	Engagement	
8.	Potholes and Bad Road Conditions- Mining Twitter to Extract	
0.	Information on Killer Roads	
9.	Bayesian Optimisation with Prior Reuse for Motion Planning in	
	Robot Soccer	
10.	Priority Based Functional Group Identification of Organic Molecules	
10.	using Machine Learning	
11.	A Neural Attention Based Approach for Clickstream Mining	
12.	MineAr: Using Crowd Knowledge for Mining Association Rules in	
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13.	Fault in your stars: An Analysis of Android App Reviews	
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