

**The First RBC-DSAI workshop on recent progress in
data science and Artificial Intelligence
10th November 2017, IIT Madras, Chennai, India**

Poster Presentation Topics

1. *Identification of output-error (OE) models using QZ algorithm,*
Deepak Maurya, Arun K Tangirala and Shankar Narasimhan
2. *Optimal observable PMU placement minimizing estimation error,*
Bala Shyamala Balaji, Satya Jayadev P, Sridharakumar Narasimhan
3. *Prediction error based clustering approach for multiple-model learning using statistical testing,*
4. Chinta Sivadurgaprasad, Abhishek Sivaram and Raghunathan Rengaswamy
5. *Iterative Multiprecision Classifiers,*
Patanjali SLPSK, Neel Gala, Kamakoti.V. and Anand Raghunathan.
6. *IoT Enabled water network monitoring and control,*
Saravanan Chinnusamy, Prasanna Mohandoss, Partha Paul, Sridharakumar Narasimhan
7. *Distributed Approximation Algorithms for Maximum Likelihood Learning in Markov Random Fields,*
Peruru Subrahmanya Swamy, Radha Krishna Ganti, Krishna Jagannathan
8. *A novel topic modeling based weighting framework for class imbalance learning,*
Sudarsun Santhiappan, Jeshuren Chelladurai, Balaraman Ravindran.
9. *Performance Guarantees in Cloud using Predictive Techniques,*
Durgesh Singh, Ramkrishna Pasumarthy
10. *An Analysis of Imbalanced Data Classification in relation to Sample Hardness,*
Satya Jayadev P, Nirav Bhatt
11. *Online reconstruction of causal graphs from data with missing observations,*
Piyush Agarwal, Arun K Tangirala
12. *DCEIL: Distributed Community Detection with CEIL Score,*
Akash Jain, Rupesh Nasre, B Ravindran
13. *A generalized framework for detection of oscillation with their frequencies and location(s),*
Mohd Faheem Ullah, Deepak Maurya, Raghunathan Rengaswamy.

14. *Modeling and characterization of seismic noise*,
Kanchan Aggarwal, Arun K Tangirala and Siddhartha Mukhopadhyay
15. *Integrating first principles modeling with data science - a case study*,
Venkataraman N V, Deepak Maurya, Raghunathan Rengaswamy
16. *Scalar Correlation Measures for Modeling Multivariate Processes*, Sudhakar
Kathari and Arun K. Tangirala.
17. *Learning to Multi-Task by Active Sampling*,
Sahil Sharma, Ashutosh Kumar Jha, Parikshit S Hegde, Balaraman Ravindran
18. *Optimal operation of water distribution systems: An experimental study*,
Saravanan Chinnusamy, Prasanna Mohandoss, Meena Kaveri, Varghese
Kurian, Sridharakumar Narasimhan
19. *Exhaustive identification of sub-networks from metabolic networks*,
Aarthi Ravikrishnan, Meghana Nasre and Karthik Raman
20. *Designing Modular Gene Circuits*,
Saransh Umale, Pradeep Natarajan, Karthik Raman, Raghunathan
Rengaswamy
21. *Disease Module Identification and Analysis*,
Beethika Tripathi, Balaraman Ravindran, Karthik Raman
22. *Encode-Attend-Refine-Decode: Enriching Encoder Decoder Models with
Better Context Representation*
Preksha nema, Shreyas Shetty, Mitesh Khapra, Balaraman Ravindran,
Anirban Laha, Parag Jain, Karthik Sankaranarayanan
23. *HOPF: A Higher Order Propagation Framework for Semi-supervised Deep
Collective Classification*
Priyesh Vijayan, Yash Chandak, Mitesh Khapra, Balaraman Ravindran.
24. *ISS-NMF: Improved Semi-Supervised learning for node classification with
Non-Negative Matrix Factorization*,
Tarun Kumar, Priyesh Vijayan, Anasua Mitra, Amit Awekar, Balaraman
Ravindran.
25. *Droplet microfluidics meets data sciences: insights into emulsion stability*
Pavitra Sivakumar, Danny Raj M, Raghunathan Rengaswamy
26. *RAIL: Risk-Averse Imitation Learning*,
Anirban Santara, Abhishek Naik, Balaraman Ravindran, and others.
27. *Vehicle Classification on Low-resolution and Occluded images: A low-cost
labeled dataset for augmentation*,

- Deepak Mittal, Mudamala Avinash Reddy, Gitakrishnan Ramadurai, Kaushik Mitra, Balaraman Ravindran.
28. *DyVEDeep: Dynamic Variable Effort Deep Neural Networks*
Sanjay Ganapathy, Swagath Venkataramani, Balaraman Ravindran and Anand Raghunathan. Presented by: Athindran R
 29. *Generalized Random Surfer Pair Models*
Sai Kiran N, Balaraman Ravindran, Venkatesh Ramaiya
 30. *Learning to Repeat : Fine Grained Action Repetition for Deep Reinforcement Learning,*
Rahul Ramesh, Sahil Sharma, Aravind Lakshminarayanan, Balaraman Ravindran
 31. *Identification of Reaction Systems using Spectroscopic Measurements and Micro-reactors.*
Manokaran V, Sridharakumar Narasimhan, Nirav Bhatt
 32. *Exploration for Multi-task Reinforcement Learning with Deep Generative Models*
Manika Agarwal , Sai Praveen Bangaru, J S Suhas, Balaraman Ravindran
 33. *SILC: Smoother Imitation with Lipschitz Costs*
Akshat Dave, Sapana Chaudhary, Balaraman Ravindran
 34. *Role Discovery in Graphs using Global Features: Algorithms, Applications and a Novel Evaluation Strategy,*
Pratik V. Gupte, Balaraman Ravindran, Srinivasan Parthasarathy, Sankaran Vaidyanathan
 35. *NBF-PEG: Network-Based Features to Predict Essential Genes across diverse organisms.* Authors:
Karthik Azhagesan, Karthik Raman and Balaraman Ravindran.
 36. *EPOpt: Learning Robust Neural Network Policies using Model Ensembles,*
Rohan Saphal, Rajeswaran A, Ghotra S, Balaraman Ravindran, and Levine S
 37. *Determining the sample size for split tests by optimizing the expected cumulative regret.*
Pitchai Kannu Balaji and Nandan Sudarsanam

38. *Mining Trajectory Data for Smart City Applications.*

Nandani Garg, Sayan Ranu and Gitakrishnan Ramadurai.

39. *Identification of tumor suppressor genes and oncogenes,*

Malvika Sudhakar, Karthik Raman and Raghunathan Rengaswamy

40. *HMM Based Clustering on Loan Repayment Data: Insights into Financial Behavior and Intent to Repay,*

Dibu John Philip, Nandan Sudarsanam and Balaraman Ravindran.