

The Seventh IEEE International Workshop on Benchmarking, Performance Tuning and Optimization for Big Data Applications (BPOD), Sunday, December 15

Workshop Chairs: Zhiyuan Chen, Jianwu Wang, Feng Chen, Junqi Yin

Workshop website: <https://bigdata.umd.edu/bpod-2024/>

Time (US Eastern Time)	Title	Presenter/Author
Session 1 (Analytics), Session Chair: Zhiyuan Chen		
8:30-8:35 am	Opening Remark	Workshop Chairs
8:35-8:55 am	S13217: "Masked Autoencoders are Parameter-Efficient Federated Continual Learners" (online)	Yuchen He, Xiangfeng Wang
8:55-9:15 am	S13218: "FPPL: An Efficient and Non-IID Robust Federated Continual Learning Framework" (online)	Yuchen He, Chuyun Shen, Xiangfeng Wang Bo Jin
9:15-9:35 am	S13203: "YOLO based Ocean Eddy Localization with AWS SageMaker"	Seraj Al Mahmud Mostafa, Jinbo Wang, Benjamin Holt, Jianwu Wang,
9:35-9:55 am	S13214: "Evaluation of Traditional and Deep Clustering Algorithms for Multivariate Spatiotemporal Data"	Francis Ndikum Nji, Rohan Mandar Salvi, Sai Sri Ram Kuram Tirumala, Jianwu Wang, Xue Zheng
9:55-10:30 am	Coffee Break	
Session 2 (Optimization), Session Chair: Zhiyuan Chen		
10:30-10:50 am	S13210: "A Bloom Filter Hierarchy for Non-key Search in Key-Value Stores"	Wojciech Macyna, Carlos Ordonez
10:50-11:10 am	S13207: "Supporting Opportunistic Data Operations for Data-Intensive Computational Applications"	Minh-Tri Nguyen, Anh-Dung Nguyen, Jarno Rantaharju, Touko Puro, Matthias Rheinhardt, Maarit Korpi-Lagg, Hong-Linh Truong
11:10-11:30 am	S13208: "The Gather Join: Efficiently Aligning Atmospheric Datasets in Apache Spark"	Oliver Nief, Justus Henneberg, Felix Schuhknecht
11:30-11:50 am	S13216: "Exploring the Landscape of Distributed Graph Clustering on Leadership Supercomputers"	Naw Safrin Sattar, Abigail Kapocius, Hao Lu, Mahantesh Halappanavar, Feiyi Wang
11:50-12:10 am	S13215: "A Hybrid Approach to Group-By and Aggregation Query Execution"	Gaurav Vaghasiya, Shiva Jahangiri
12:10 am-12:25 pm	BigD620: "Interval cracking and its application to databases of complex geometries"	Masoumeh Vahedi, Henning Christiansen
12:25-12:40 pm	BigD734: "Performance of Data Model over Computational Power in CDP Platforms" (online)	Ruhul Mundlamuri, Hassan Siddiqi, Sohail Wadera
12:40-2:00 pm	Lunch Break (on your own)	
Session 3 (Benchmark), Session Chair: Feng Chen		
2 - 2:20 pm	S13201: "On Energy-aware and Verifiable Benchmarking of Big Data AI Pipelines"	George Theodorou, Sophia Karagiorgou, Christos Kotronis
2:20 - 2:40 pm	S13209: "Model-agnostic Body Part Relevance Assessment for Pedestrian Detection Model Benchmarking"	Maurice Gnder, Sneha Banerjee, Rafet Sifa, Christian Bauckhage
2:40 - 3 pm	BigD819: "Reasoning Over Streaming System Performance Using Response Surface Methodology" (online)	Stuart Jamieson, Matthew Forshaw
3-3:15 pm	S13211: "Experimentally Evaluating the Resource Efficiency of Big Data Autoscaling"	Jonathan Will, Nico Treide, Lauritz Thamsen, Odej Kao
3:15-3:30 pm	S13212: "Measuring Application Interference with System-Level Instrumentation" (online)	Soeren Becker, Robin Goege, Odej Kao
3:30-3:45 pm	S13213: "Challenges and Future Directions in Similarity Assessment of Big Data Analytics Workloads" (online)	Dominik Scheinert, Alexander Guttenberger, Jonathan Will, Odej Kao
3:45-4 pm	BigD742: "Comparison of CNN and QCNN Performance in Binary Classification of Breast Cancer Histopathological Images"	Taieba Tasnim, Mohammad Rahman, Fan Wu

4 - 4:20 pm	Coffee Break	
	Session 4 (analytics & optimization), Session Chair: Feng Chen	
4:20 - 4:40 pm	BigD661: "Groundwater Level Prediction: Analyzing the Performance of LSTM and QLSTM Model"	Aditi Saha, Mohammad Rahman, Fan Wu
4:40-5 pm	BigD425: "FairLENS: Assessing Fairness in Law Enforcement Speech Recognition"	Yicheng Wang, Mark Cusick, Mohamed Laila, Kate Puech, Zhengping Ji, Xia Hu, Michael Wilson, Noah Spitzer-Williams, Bryan Wheeler, Yasser Ibrahim
5-5:20 pm	BigD256: "A Model for Data Processing on Warehouse-Scale Computers" (online)	Kevin Exton, Maria Rodriguez
5:20-5:40 pm	S13204: "Improving I/O-aware Workflow Scheduling via Data Flow Characterization and trade-off Analysis"	Luanzheng Guo, Meng Tang, Hyungro Lee, Jesun Firoz, Nathan Tallent
5:40-6 pm	S13206: "Mitigating Gradient Overlap in Deep Residual Networks with Gradient Normalization for Improved Non-Convex Optimization"	Juyoung Yun
6-6:05 pm	Closing Remarks	