

38th IEEE International Parallel & Distributed Processing Symposium

IPDPS 2024 PhD Forum - May 28-30, 2024

Research Projects Selected for Poster Presentation

- 1. Yi-Chien Lin (University of Southern California): A Runtime System for GNN Training on Heterogeneous Platforms
- 2. Amine Barrak (University of Quebec at Chicoutimi): *Advancing Serverless Distributed Machine Learning Training Architectures*
- 3. Thomas Bain (University of Southampton): An Investigation into the Design of Many-Processor Architectures to Best Utilise the Resources of a Modern FPGA
- 4. Yufan Xia (The Chinese University of Hong Kong): Machine Learning-Based Runtime Optimization of BLAS III Operations on Modern Multi-Core Systems
- 5. Noemi D'Abbondanza (University of Camerino, Istituto Italiano di Tecnologia): Development of a Heterodyne Brillouin Microscope for Biomedical Applications
- 6. Diogo Landau (Utrecht University): Root-cause Discovery of Application Performance Degradation
- 7. Serhan Gener (The University of Arizona): Intelligent Resource Management in Heterogeneous Systems Under Dynamic Application Arrival and Priority Shift Scenarios
- 8. H. Umut Suluhan (The University of Arizona): Seamless and Rapid PyTorch Model Deployment in Heterogeneous SoC
- 9. Gregory Bolet (Virginia Tech): Online Tuning of CUDA Kernel Grid Size Using Bayesian Optimization Models
- 10. Reza Sajjadinasab (Boston University): Exploring Machine Learning Approaches for Compiler Optimization
- 11. Niteya Shah (Virginia Tech): Parameter Estimation for Femtoscale Imaging of Nuclei
- 12. Gianmarco Accordi: Performance Portability for Virtual Screening Applications on Heterogeneous Architectures
- 13. Hasanul Mahmud (Politecnico di Milano): *Boosting DNN accuracy with Entropy-driven Generalized Converting Autoencoder*
- 14. Buddhi Ashan Mallika Kankanamalage (The University of Texas at San Antonio): *Parallel Computing for Efficient Polygon Clipping Computation over Large Polygonal Datasets*
- 15. Ahmad Hossein Yazdani (Virginia Tech): Characterization of the Concurrent Application I/O Interference in Leadership Scale Systems: A Focus on I/O Optimization
- 16. Md Taufique Hussain (Indiana University): Graph Clustering at Extreme Scale
- 17. Ian D. Lumsden (University of Tennessee): *Empirical Study of Molecular Dynamics Workflow Data Movement: DYAD vs. Traditional I/O Systems*
- 18. Filippo Carloni (Politecnico di Milano): *Unleashing the Power of Regular Expressions Through Tight Hardware and Software Integration*
- 19. Jurdana Masuma Iqrah (University of Texas at San Antonio): A Parallel Workflow for Arctic and Antarctic Sea-Ice Classification using Sentinel-2 Imagery
- 20. Hanieh Toutouni (University of South Florida): A GPU-based Molecular Dynamics Framework using Tree Architecture