Ohio Supercomputer Center

SUG
Statewide Users Group

Fall Conference
October 4th, 2018
Agenda

Thursday, October 4th

<table>
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<tr>
<th>Time</th>
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| 9:00–10:00 am | Breakfast Assortment  
Hardware Committee  
Software Committee | BALE Area  
204 Conference Room  
350 Conference Room |
| 10:00–11:00 am | Breakout Sessions:  
Pitzer Information Session  
OSC Campus Champions  
Data Analytics  
Client Portal | 204 Conference Room  
200 Conference Room  
BALE Conference Room  
208 Conference Room |
| 11:00–11:45 am | OSC: Welcome and Presentation | BALE Theater |
| 11:45 am – 12:00 pm | Lunch Pick-up | BALE Lobby |
| 12:00–12:55 pm | Keynote Speaker: Russ Fromkin | BALE Theater |
| 1:00–1:50 pm | Flash Talks Session 1 | BALE Theater |
| 2:00–2:50 pm | Flash Talks Session 2 | BALE Theater |
| 3:00–4:45 pm | Poster Session  
Hors d’Oeuvres  
Networking | BALE Lobby |
| 4:45 pm | Poster and Flash Talk Winner Announcement | BALE Theater |

Flash Talks

**Session 1**

1. Molecular model development with accurate charge distributions for gaseous adsorption in porous materials  
   Eun Hyun Cho | The Ohio State University
2. Molecular Dynamics and Umbrella Sampling Simulations Elucidate Differences in Troponin C Isoform and Mutant Hydrophobic Patch Ex  
   Jacob Bowman | The Ohio State University
3. Stellar explosions at OSC  
   Shiv Subedi | Ohio University
4. Disentangling the process of speciation using machine learning  
   Megan Smith | The Ohio State University

**Session 2**

5. Optimized Molecular Mechanics Protein Potential Improves Dynamics of Intrinsically Disordered Proteins  
   Lei Yu | The Ohio State University
   Dylan Wood | The Ohio State University
7. Genomic signatures of convergent adaptation in semiaquatic mammals  
   Drew Duckett | The Ohio State University
8. Computational Modeling of cooldown of an Engine Mount  
   Navni Verma | The Ohio State University
Keynote Address

Russ Fromkin
Americas HPC and HPDA Sales Director
Intel Corporation

Russ Fromkin is the Americas HPC and HPDA Sales Director for the Intel Corporation. Russ and his team are responsible for helping technical computing and data analytics customers implement cutting edge technologies developed by Intel Corporation. Russ joined Intel Corporation in 1999 as part of an acquisition of Dialogic Corporation. Prior to his current role, Russ helped lead Information Assurance, HPC and Cloud Computing activities for the Intel Federal team. Prior to the acquisition, Russ developed and managed the ISV program for Dialogic. Russ holds a BA from The Johns Hopkins University.

Posters

1. Chemoinformatic Analysis of a Target RNA Element
   Ali Aldhumani | Ohio University
2. NASA Airborne Hyperspectral Image Analysis: the 2016 Lake Erie CyanOHAB
   Dulci Avouris | Kent State University
3. Convolutional Neural Networks and Deep Learning to Detect Mineral Crystal System
   Neeman Alisa | Muskingum University
4. Recent Results on Finite-Element-based Particle-in-Cell Methods for Kinetic Plasma Simulations
   Julio de Lima Nicolini | The Ohio State University
5. Deconvolution of Complex Scattering in Atomic Resolution Spectroscopic Images Using Multi-slice Simulations
   Binbin Wang | The Ohio State University
6. Molecular simulations of polymer membranes: effects of water
   Xuepeng Deng | The Ohio State University
7. Systematic analysis of function and regulation of microRNA isoforms in Cancer
   Rosario Distefano | The Ohio State University
8. Application of Finite Volume Method in simulating erythrocytes separation
   Xuyao Gao | The Ohio State University
9. Two photon absorption of bovine Rhodopsin
   Samira Gholami | Bowling Green State University
10. Using the Ohio Supercomputer cluster to measure developmental changes in connectivity between the amygdala subnuclei and occipit
    Heather Hansen | The Ohio State University
11. Phase Field Modelling of Transformation Pathway in HEA
    Kamalnath Kadirvel | The Ohio State University
12. Studying Infant Hippocampal Connectivity with the OSC
    Athena Howell | The Ohio State University
13. Early Results of Monte-Carlo Simulations for NaxCoO2
    Joseph Lanier | Xavier University
14. Filter-and-Convolve: A CNN Based Multichannel Complex Concatenation Acoustic Model
    Peidong Wang | The Ohio State University
15. Connectivity patterns between language and visual systems in neonatal and adults brain
    Jin Li | The Ohio State University
16. A comprehensive study of StaQC for Deep Code Summarization
    Jayavardhan Reddy Peddamallu | The Ohio State University
17. Predicting reading ability based on anatomical and functional neural connectivity
    Carver Nabb | The Ohio State University
18. Goniopolarity: Axis-Dependent Conduction Polarity in Layered Materials
    Yaxian Wang | The Ohio State University
19. Quantum Mechanical Calculations Towards The Discovery Of Therapeutics For Organophosphorus Poisoning
    Ola Nosseir | The Ohio State University
20. Large Eddy Simulations of Sustainable Greenbelts in Industrial Complexes
    Theresia Yazbeck | The Ohio State University
21. Use of Computational Tools in the Search for the Next Generation of Materials for Regenerative Medicine Applications
    Felipe Fabricio Pacci Evaristo | The Ohio State University
22. Large-scale Computation for Plasma Opacities
    Lianshui Zhao | The Ohio State University
23. Exploring the development of high-level visual connectivity in infants on the Ohio Supercomputer Center cluster
    Micah Rhodes | The Ohio State University
24. Computational Studies of Zeolite Nanosheets as Pervaporation Membranes for Ethanol Extraction
    Changlong Zou | The Ohio State University