

5th Annual Summit 2022

(Virtual Tentative Agenda)

Date: April 12 and April 13, 2022, **Time:** 10 am to 3 pm Eastern Time
University of Kentucky (Center for Computational Sciences)
Lexington, Kentucky

Tuesday 04/12/2022: Day 1

| Time | Topic |
|------------------------|---|
| 10:00 AM - 11:00 AM | Industry Featured Keynote - Henry Neeman, UO OURRStore: A Cost-Effective Storage Archive Alternative |
| 11:00 AM - 12:00 PM | Industry Tech Talks (parallel sessions) – <ul style="list-style-type: none">• Industry Session A – Jay Boisseau, Dell Hybrid Multi-cloud HPC: Delivering Better Answers Faster, Everywhere• Industry Session B – Chris Kehoe, FujiFilms Addressing the long-term data preservation challenges for computational workflows with Fujifilm’s Object Archive• Industry Session C – Matthew Demas, GigaIO The future of memory in HPC |
| 12:00 PM - 1:00 PM | Lunch |
| 1:00 PM – 3:00 PM | Industry Session D & G – Johannes Blaschke, NERSC Learning Data Science using Jupyter Notebooks and the Julia Language |
| 1:00 PM - 2:00 PM | <ul style="list-style-type: none">• Industry Session E – Dave Fitch, Spectra Institutional Storage/Archive Systems to Support Research Needs• Industry Session H – Kristopher Keipert, NVIDIA Four Ways to Use an NVIDIA GPU |
| 2:00 PM - 3:00 PM | <ul style="list-style-type: none">• Industry Session F – Hoang Phan, HPE HPE Cray AI Development Environment – Scaling Deep Learning Model Development from Cloud to Core• Industry Session I – Scott Friedman, AWS The real world: How Hybrid of both on-premises and cloud accelerates research |

Wednesday 04/13/2022: Day 2

| Time | Topic |
|---------------------|--|
| 10:00 AM - 11:00 AM | Academic Keynote - Robert Grossman |
| 11:00 AM - 12:00 PM | <p>Ky Cyberteam Faculty Lightning Talks</p> <ol style="list-style-type: none"> 1. Title: Hybrid Machine Learning for Adaptive Robotic Welding Control Peng (Edward) Wang 2. Title: Qualitative Data Science: Exploration of Preceptor Feedback for Health Professions Learners Shelley Irving, PA-C; Leslie Woltenberg, PhD, MS Ed; Isaac Joyner, MPH 3. Title: What Machine and Deep Learning Can Contribute to our Understanding of Ancient Societies, Phyllis S. Johnson 4. Title: Predicting Stock Splits Using Ensemble Machine Learning and SMOTE Oversampling, Mark Liu 5. Title: Introduction to The WKU Applied Center for Data Science Richard Schugart 6. Title: Combating Psyber-security Attacks using Machine Learning Techniques, Seth Adjei 7. Title: Genetic Ramp Sequences Increase Gene Expression: How ramps of suboptimal codons can affect disease by impacting transcript and protein levels. Justin Miller |
| 12:00 PM - 1:00 PM | Lunch |
| 1:00 PM - 2:00 PM | <p>Data Sciences Panel – Research & Education across the Commonwealth - Discussion Topic: Data Science Challenges and Opportunities in Research and Education across the Commonwealth Panel Moderator: (Cody Bumgardner) Panelist:</p> <ul style="list-style-type: none"> • Maureen Doyle, Associate Professor and Chair of Computer Science, Northern Kentucky University • David Fardo, Professor of Biostatistics, Stephen W. Wyatt Endowed Professor of Public Health, University of Kentucky • Jens Hannemann, Associate Professor of Computer Science, Kentucky State University • Harry Zhang, Associate Professor of Computer Science and Engineering, University of Louisville |
| 2:00 PM - 3:00 PM | NSF Mid-Scale Cultural Heritage Lab - EduceLab - Brent Seales |