HPC4EnergyInnovation Online Colloquium:

Machine Learning

March 22, 2019
9:00 a.m. PT (12:00 p.m. ET)

Agenda

12:00 p.m. ET
9:00 a.m. PT
HPC4EnergyInnovation Program Overview: National Laboratories Partner with U.S. Manufacturers to Increase Innovation and Energy Efficiency
Robin Miles, HPC4EI Program Director

12:15 p.m. ET
9:15 a.m. PT
Motivation for Machine Learning in Product and Process Development
David Womble, Oak Ridge National Laboratory

12:30 p.m. ET
9:30 a.m. PT
What Can Deep Learning Do for You?
Brenda Ng, Lawrence Livermore National Laboratory

1:30 p.m. ET
10:30a.m. PT
Modern Data Analytics Approach to Predict Creep of High-Temperature Alloys
Dongwon Shin, Oak Ridge National Laboratory

2:00 p.m. ET
11:00 a.m. PT
Accelerated Search for Materials with Targeted Properties
Turab Lookman, Los Alamos National Laboratory

2:30 p.m. ET
11:30 a.m. PT
Machine Learning for Better Understanding and Control of Complex Processes
Victor Castillo, Lawrence Livermore National Laboratory

3:00 p.m. ET
12:00 p.m. PT
Machine Learning for Material Property Design at the Atomic Level
Tess Smidt, Lawrence Berkeley National Laboratory

3:30 p.m. ET
12:30 p.m. PT
HPC4Mobility and Machine Learning Applied to Transportation Systems
David Anderson, Department of Energy, EERE, VTO
Jane MacFarlane, Lawrence Berkeley National Laboratory
Tom Karnowski, Oak Ridge National Laboratory

4:00 p.m. ET
1:00 p.m. PT
Error Analysis of System Modeling using Artificial Intelligence and Machine Learning
Brian Valentine, Department of Energy, EERE, AMO