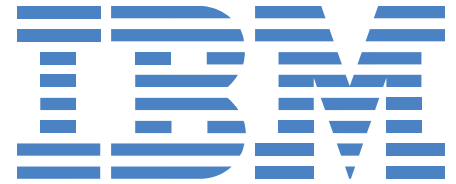


IBM PowerAI Workshop



April 2-3, 2019

University of Tennessee Conference Center
Room CONF 413AB

For more information and to register, please visit: <https://tiny.utk.edu/IVyhF>

Tuesday, April 2

8:30 AM - 4:30 PM

This one-day workshop is recommended to students and post-docs

- 8:30** **Introductions** - Workshop Overview and Objectives
- 8:35** **Welcome and Overview of UTK / IBM relationship**
Speaker: Dr. Greg Peterson, EECS Chair and Professor
- 8:40** **Welcome and Overview of HPC at UTK**
Speaker: Dr. Michela Taufer, Jack Dongarra Professor in EECS
- 8:45** **HPC Environment for Cogitative Computing**
Requirements, challenges and opportunities when using AI on HPC
- 9:15** **IBM Deep Learning - The Art of the Possible**
PowerAI Power Vision - Tensorflow, Caffe, PyTorch and more.
- 9:45** **Watson Studio** - Work with data to build and train models at scale.
- 10:15** **Break - Refreshments** (15 min)
- 10:30** **Image Processing with PowerAI Vision and IBM Video Analytics**
PowerAI Vision makes computer vision with deep learning more accessible to business users. PowerAI Vision includes an intuitive toolset for deep learning expertise.
- 11:00** **H2O Driverless AI**
With Driverless AI, everyone, including expert and junior data scientists, domain scientists and data engineers can develop trusted machine learning models.
- 11:30-1:00** **Lunch break** (on your own in downtown Knoxville)
- 1:00** **Hands-on Workshop** (Breaks as needed)
Assemble/ Train / Deploy basic models. Overview of challenge. Tips/tricks to get started. Topics covered include:
- Tensorflow
 - H2O Driverless AI
 - PowerAI Vision
- 4:30** **Closing Remarks - Next Day discussion topics / Feedback**

Wednesday, April 3

8:30 AM - 4:30 PM

Cognitive Computing “At Scale”

This one-day workshop is recommended to staff, scientists, post-docs at universities, national laboratories, and local companies.

- 8:30** **Introductions**
Workshop Overview and Objectives
- 8:35** **Welcome and overview of UTK / IBM relationship**
Speaker: Dr. Greg Peterson, EECS Chair and Professor
- 8:40** **Welcome and overview of HPC at UTK**
Speaker: Dr. Michela Taufer, Jack Dongarra Professor in EECS
- 8:45** **Open Forum**
Short open forum to introduce attendees’ projects and needs (open microphone)
- 9:00** **AI Solutions: IBM Cognitive AI Toolbox**
- 9:45** **The Engine that drives Research Computing at Scale - IBM Load Sharing Facility**
- 10:30** **Break - Refreshments** (15 min)
- 10:45** **HPC Multitenant Shared Services - IBM Spectrum Conductor**
- 11:00** **Use Cases and User Experiences- IBM perspective**
- 11:30-1:00** **Lunch Break** (on your own in downtown Knoxville)
- 1:00** **Machine Learning / Deep Learning Application developers - IBM Watson Studio, PowerAI Vision and other AI tools**
- 1:45** **IBM Quantum Computing**
- 2:30** **Break - Refreshments** (15 min)
- 2:45** **NVIDIA GPU Acceleration - Oak Ridge National Laboratory and Summit**
- 3:30** **Oak Ridge National Laboratory “Summit” cluster**
Overview of the Oak Ridge National Laboratory (ORNL) Summit and its Use for Scientific Applications. Speaker: Jack Wells, Director of Science for the Oak Ridge Leadership, ORNL
- 4:00** **UT Chattanooga and IBM**
Overview of the UT Chattanooga Interdisciplinary Research and Collaborations. Speaker: Anthony Skjellum, Professor and Director, SimCenter: Computer Science and Engineering, UT Chattanooga
- 4:30** **Closing Remarks / Feedback**