Exascale Computing Project Industry Council

November 7, 2018
Lawrence Berkeley National Laboratory

Meeting Agenda

Note that this agenda is designed to be highly interactive with discussion on each topic. More time can be spent on certain areas if discussion warrants.

Wednesday, November 7, 2018

8:00 a.m.   **Bus from Guest House to Wang Hall**
Members who are not staying at the Guest House should meet in the lobby by 7:45.

8:10 a.m.   **Working Breakfast**
Host welcome, safety talk, agenda review, goals for the day.

Kathy Yelick
Associate Laboratory Director, Computing Sciences Directorate
Lawrence Berkeley National Laboratory

David Martin
Co-Executive Director, ECP Industry Council

Suzy Tichenor
Co-Executive Director, ECP Industry Council

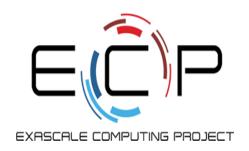**8:45 a.m.**   **Welcome from the Chair**
Welcome; Introduce new members.

Dave Kepczynski
Chairman, ECP Industry Council

9:00 a.m.   **U.S. Exascale Computing Project: Director's Update**

Doug Kothe
Director, Exascale Computing Project

10:00 a.m.   **Break**

10:15 a.m.   **Industry Lightning Talks on Use of Artificial Intelligence/Machine Learning**

Kim Boone
General Manager, Technical Computing
Chevron Energy Technology Company
Chevron Corporation

Chris Helsel
Vice President and Chief Technology Officer
The Goodyear Tire & Rubber Company

Jeff Wike
Chief Technology Officer
DreamWorks Animation

Dave Kepczynski
Chief Information Officer, GE Global Research
General Electric

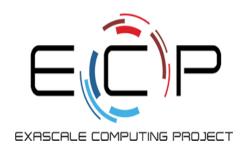**11:15 a.m.**   **Industry Council Discussion**

Questions to Consider:
- Are there commonalities among the needs expressed in the lightning talks and needs of the rest of the Industry Council?
- How fast is your company/industry moving toward AI/ML?
- Are off-the-shelf industry frameworks adequate? Is anything missing?
- How can ECP help you make progress in AI/ML application?

12:00 p.m.   **Break/Working Lunch**
Overview of the National Energy Research Scientific Computing Center (NERSC)

Jeff Broughton
NERSC Deputy for Operations
Lawrence Berkeley National Laboratory

1:00 p.m.   **Tour of NERSC**

Jeff Broughton
NERSC Deputy for Operations
Lawrence Berkeley National Laboratory

Jonathan Carter
Deputy for Science, Computing Sciences Directorate
Lawrence Berkeley National Laboratory, and
Deputy Director, ECP Software Technology

1:30 p.m.   **Application Development (AD) Focus Area Update**
Significant developments since April meeting; How AI/ML are affecting AD.

Andrew Siegel
Director, ECP Application Development

1:45 p.m.   **ECP Projects in Machine Learning and Data Analytics**

Phil Colella
ECP Application Development Lead for Co-Design

Bill Hart
ECP Application Development Lead for Data Analytics and Optimization Applications

2:45 p.m.   **Software Technology (ST) Focus Area Update**
Significant developments since April meeting; How AI/ML are affecting ST.

Mike Heroux
Director, ECP Software Technology

3:00 p.m.   **Break**

3:15 p.m.   **Annual Meeting**
Review Industry Council/staff engagement.

Suzy Tichenor
Co-Executive Director, ECP Industry Council

3:30 p.m. **Hardware and Integration (HI) Focus Area Update**
Significant developments since April meeting; How AI/ML are affecting HI.

Terri Quinn
Director, ECP Hardware & Integration

3:45 p.m. **Engaging Industry Communities**

David Martin
Co-Executive Director, ECP Industry Council

4:00 p.m. **Roundtable Discussion/Next Steps**

5:00 p.m. **Adjourn and Group Photo - Bus Departs for Molecular Foundry Tour**
Quick break and walk to bus.

5:15 p.m. **Molecular Foundry Tour**

Jeffrey Neaton
Associate Laboratory Director for Energy Sciences, and
Director, Molecular Foundry
Lawrence Berkeley National Laboratory

6:15 p.m. **Bus Returns to Wang Hall for Reception and Dinner**

6:30 p.m. **Reception**

7:15 p.m. **Working Dinner**
Overview of Lawrence Berkeley National Laboratory Priorities and Resources.

Kathy Yelick
Associate Laboratory Director, Computing Sciences Directorate
Lawrence Berkeley National Laboratory

8:45 p.m. **Bus Returns to Guest House**