

Welcome to the BoF on
**Software Engineering and Reuse in
Modeling, Simulation, and Data
Analytics for Science and Engineering**

BoF series website permalink: <http://bit.ly/swe-cse-bof>

Discussion notes: <https://bit.ly/swe-cse-notes>

Please remember to evaluate this BoF via the conference website

Organizers

Name	Affiliation
David E. Bernholdt	Oak Ridge National Laboratory
Anshu Dubey	Argonne National Laboratory
Nasir Eisty	Boise State University
William F. Godoy	Oak Ridge National Laboratory
Mozhgan Kabiri chimeh	NVIDIA
Spencer Smith	McMaster University
Marion Weinzierl	Durham University



Motivation and Goals

- CSE software developers already facing scientific demands for “bigger, better, and faster” modeling and simulation capabilities, entailing larger, more multidisciplinary and geographically dispersed development teams, must now also contend with significant architectural changes. Further, increases in data volume and complexity, and the increasing integration of “big data” (analytics) infrastructures (both hardware and software) raise additional SWE challenges.
- Our goal is to bring together people concerned about this topic to share existing activities, discuss how we can expand and improve on them, and share the results, complementing “traditional” venues for the academic (often versus practical) discussion of SWE for CSE, such as conferences and workshops.

Agenda

Time	Title	Speaker/ Moderator	Affiliation
5 min	Introduction and Goals	David E. Bernholdt	Oak Ridge National Laboratory
3 min	Growing The Cactus Computational Toolkit Community	Stephen R. Brandt	Louisiana State University
3 min	Hackathons	Mozhgan Kabiri chimeh	NVIDIA
3 min	Using code or ideas	Tobias Weinzierl	Durham University
3 min	INTERSECT Research Software Engineering Training	Ian A. Cosden	Princeton University
3 min	Creating (or not creating) portable tests	Kevin Gott	NERSC
3 min	Cultural Barriers to HPC Software Development	Charles Ferenbaugh	Los Alamos National Laboratory
3 min	MOOSE - Continuous Integration, In-Code Documentation and Automation for Research Software	Oana Marin	Idaho National Laboratory
3 min	I'm not an RSE but I'm a believer	Blake Joyce	University of Alabama Birmingham
56 min	General Discussions (https://bit.ly/swe-cse-notes)	David E. Bernholdt	Oak Ridge National Laboratory
5 min	Wrap-Up and Next Steps	David E. Bernholdt	Oak Ridge National Laboratory