



**SC21**

St. Louis, MO | science & beyond.

# Birds of a Feather on Software Engineering and Reuse in Modeling, Simulation, and Data Analytics for Science and Engineering

BOF web site: <http://bit.ly/swe-cse-bof> | Please remember to evaluate this BOF!



## Motivation and Goals

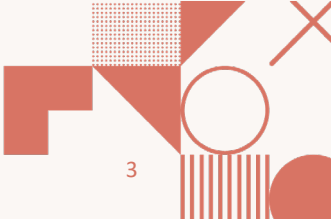
- CSE software developers already facing scientific demands for “bigger, better, and faster” modeling and simulation capabilities, entailing larger, more multidisciplinary and geographically dispersed development teams, must now also contend with significant architectural changes. Further, increases 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.



# Organizers

Name	Affiliation
David E. Bernholdt	Oak Ridge National Laboratory
Anshu Dubey	Argonne National Laboratory
Nasir Eisty	Boise State University
Sandra Gesing	Discovery Partners Institute (DPI)
Rinku Gupta	Argonne National Laboratory
Axel Huebl	Lawrence Berkeley National Laboratory (LBNL)
Mozhgan Kabiri Chimeh	NVIDIA
Tomislav Maric	Technical University Darmstadt
Marion Weinzierl	Durham University

BOF web site: <http://bit.ly/swe-cse-bof> | Please remember to evaluate this BOF!



# Agenda

Time	Title	Speaker/Moderator	Affiliation
5 min	Introduction and Goals	David E. Bernholdt	Oak Ridge National Laboratory
3 min	Ecosystems are the Future!	Benjamin Brown	Office of Advanced Scientific Computing Research, Office of Science, U.S. Dept. of Energy
3 min	Open Source for Researchers	Yo Yehudi	Wellcome Trust
3 min	The Internat. CSE Master Program at TUM	Michael Bader	Technical University of Munich
3 min	Senior Level RSE career paths (with an s)	Daniel S. Katz	University of Illinois at Urbana-Champaign
3 min	FAIR 4 Research Software (FAIR4RS)	Michelle Barker	Research Software Alliance
3 min	Highlights from the IEEE CS Ad Hoc Committee on Open Science & Reproducibility	Manish Parashar	University of Utah
5 min	Breakout Instructions	David E. Bernholdt	Oak Ridge National Laboratory
30 min	Breakout Discussions	David E. Bernholdt	Oak Ridge National Laboratory
30 min	Lightning Report-Backs	David E. Bernholdt	Oak Ridge National Laboratory
2 min	Wrap-Up	David E. Bernholdt	Oak Ridge National Laboratory

BOF web site: <http://bit.ly/swe-cse-bof> | Please remember to evaluate this BOF!



## Discussion Plan

- We hope to approximate the free-wheeling discussions of the in-person versions of this BOF
- By using Zoom breakout rooms to hold smaller parallel discussions
- Followed by a very brief report-back of a single take-away message
- Organizers will use discussion notes to write a summary for the BOF web site and a [BSSw.io](https://BSSw.io) blog post
- Detailed instructions to follow the Lighting Talks

BOF web site: <http://bit.ly/swe-cse-bof> | Please remember to evaluate this BOF!



## Lightning Talks

Title	Speaker/Moderator	Affiliation
Ecosystems are the Future!	Benjamin Brown	Office of Advanced Scientific Computing Research, Office of Science, U.S. Dept. of Energy
Open Source for Researchers	Yo Yehudi	Wellcome Trust
The Internat. CSE Master Program at TUM	Michael Bader	Technical University of Munich
Senior Level RSE career paths (with an s)	Daniel S. Katz	University of Illinois at Urbana-Champaign
FAIR 4 Research Software (FAIR4RS)	Michelle Barker	Research Software Alliance
Highlights from the IEEE CS Ad Hoc Committee on Open Science & Reproducibility	Manish Parashar	University of Utah

BOF web site: <http://bit.ly/swe-cse-bof> | Please remember to evaluate this BOF!

