



Better Scientific Software

Dedicated to improving developer productivity and software sustainability for CSE

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SC17 BOF: Software Engineering and Reuse in Computational Science and Engineering

<https://bssw.io>

Better Scientific Software (BSSw)

Scientific software has emerged as an essential discipline in its own right. Because computational models, computer architectures, and scientific software projects have become extremely complex, the Computational Science & Engineering (CSE) community now has a unique opportunity—and an implicit mandate—to address pressing challenges in scientific software productivity, quality, and sustainability.

Collaborative content development on general topics topics related to developer productivity and software sustainability for CSE

We want and *need* contributions from the community ... Join us!

GET ORIENTED

Communities Overview

Site Overview

Intro To CSE

Intro To HPC



New web-based hub for scientific software improvement exchange

BSSw Software Platform

Component Technology	Backend		Frontend
	Google Docs	GitHub	Ruby on Rails
Location	Google Drive	betterscientificsoftware GitHub organization	https://bssw.io
Purpose	<ul style="list-style-type: none"> Rapid collaborative content development Multi-user typing, suggest edits, comments 	<ul style="list-style-type: none"> Content creation, refinement, management (from Google Drive) Content packaging for use with bssw.io 	<ul style="list-style-type: none"> User-facing portal Polished backend content Blogs, forums Mailing lists
Contributors	Community subject matter experts	Community subject matter experts, BSSw staff	BSSw staff. Web development experts
Consumers	BSSw GitHub Backend	BSSw Frontend	CSE community
Content Notes	Content migrates to GitHub after it stabilizes	Content managed in git repos, markdown	Content from Backend

Contribute! Share your insights on CSE software practices and processes:

- <https://github.com/betterscientificsoftware/betterscientificsoftware.github.io/blob/master/README.md>
- Or search “github **b**etterscientificsoftware”



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Types of Content

- **"What Is" document:** Define terms and concepts in a particular topic area.
- **"How To" document:** A document that describes a process for improving productivity and sustainability.
- **Original experience:** An original article to inform the CSE community about how to improve developer productivity and software sustainability.
- **Blog article:** An original article in the form of a blog of 250 - 500 words. We will solicit contributions from thought leaders in the community and welcome proposals from anyone.
- **Curated links:** A brief article that highlights other web-based articles or content. Your article should describe why the CSE community might find value.
- **Event:** A brief description of an event relevant to better scientific software.

In-scope Content

- General issues in productivity and sustainability that overlap with common challenges faced in the CSE software community.
- General tools for productivity and sustainability that can be widely used by CSE developers.
- Characterization of challenges and solutions that may be particularly valuable to the CSE community.

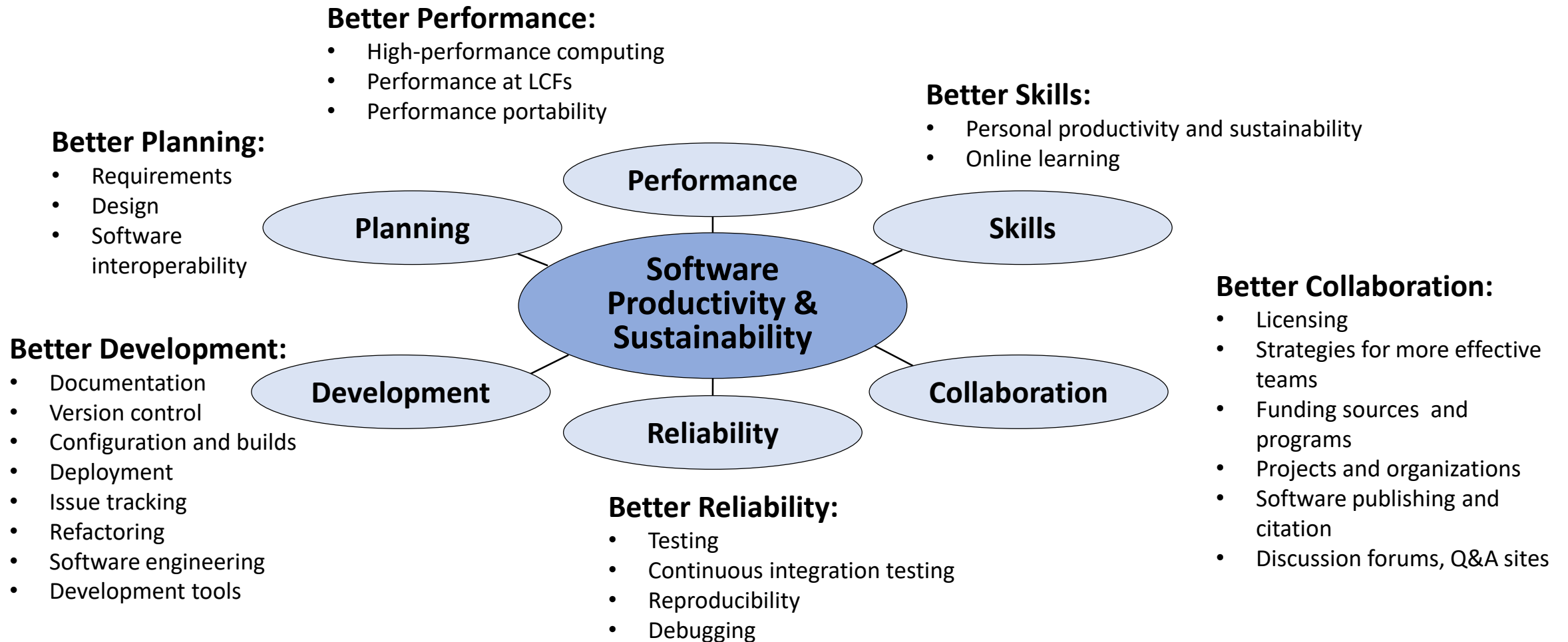
Highlight Connections to CSE

- How your topic intersects with themes that are of particular interest to CSE, for example MPI, Fortran, C++, architectures, modeling and simulation.
- Why your topic could be of particular interest to CSE.

Ease of Adoption and Use

- Address how easy or hard it is to benefit from your topic.
- Address who would be particularly interested in the topic.

Resource Topics



We need your input! Contribute to BSSw!



Tech tattoo



BSSw Fellowship Program

Goal: Foster and promote practices, processes, and tools to improve developer productivity and software sustainability of scientific codes.

Application process: Includes the proposal of a funded activity that promotes better scientific software.

Awards: We select three Fellows* per year. Each Fellow is awarded up to \$10,000 for an activity that promotes better scientific software. Activities can include organizing a workshop, preparing a tutorial, or creating content to engage the scientific software community.

* BSSw Fellows must be affiliated with a U.S.-based institution that is able to receive funding from the U.S. Department of Energy.

Details: <https://bssw.io> ... Click on ***BSSw Fellowship Program*** ... in the footer area

Timeline

- **Dec 1, 2017:** Fellowship application process opens
- **Dec 11, 2017:** Fellowship webinar, Q&A. [Subscribe to the BSSw mailing list](#) to be notified about details
- **Jan 5, 2018:** Application deadline
- **Jan 12, 2018:** Notification of 2018 BSSw Fellows
- **Feb 6 - 8, 2018:** Fellows announced at DOE ECP Annual Meeting in Knoxville, TN