# Summary of Recurring Workshops in the SWE for CSE on HPC Area

Daniel S. Katz and Neil Chue Hong (with additional contributions from Jeff Carver, Marlon Pierce, Greg Watson)

#### Sustainability Software Education Impact Science Governance Working towards Sustainable Software for Science Training Careers **Practice and Experiences** Incentives Research Communities Policy (WSSSPE) Reuse Development Engineering

### Interested in Sustainable Software for Science?

Motivation: Progress in scientific research is dependent on the quality and accessibility of software at all levels and it is now critical to address many new challenges related to the development, deployment, and maintenance of reusable software. In addition, it is essential that researchers and students are able to learn and adopt a new set of software-related skills and methodologies. Established researchers are already acquiring some of these skills, and in particular a specialized class of software developers is emerging in academic environments who are an integral and embedded part of successful research teams. WSSSPE provides a forum for discussion of the challenges, and for the community to assemble and act upon them.

Software Sustainability Institute Survey: http://tinyurl.com/mxz2jx9:

- \* 92% of UK academics use research software.
- \* 69% say that their research would not be practical without it
- \* 35% spend at least one fifth of their time developing software.

Past Events • WSSSPE1 at SC13 • WSSSPE1 1 at Scill

```
WSSSPE1.1 at SciPy'14
```

- WSSSPE2 at SC14
- WSSSPE2.1 at SciPy'15
- WSSSPE3 (standalone)

#### Mailing list

• Low frequency, mostly announcements

#### Papers

- 80 accepted workshop papers, and additional recorded lightning talks
- Special collection of 17 papers published in Journal of Open Research Software, including report on WSSSPE1

 $\circ$  Report on WSSSPE2 in arXiv, under review in JORS Actions

 $\circ$  Being planned based on WSSSPE2 & WSSSPE3 breakouts

### We are a very open community - Participate! Join the mailing list! Come to an event! Write a paper! Join a group!

https://www.facebook.com/groups/wssspe/

f

http://wssspe.researchcomputing.org.uk



### ApacheCon, HPC and Cyberinfrastructure

- Location: North America and Europe
- Dates: Spring (NA), Fall (Europe)
- Target audience: creators and users of Apache Software Foundation software
- Why interesting?
  - Learn about Apache's open governance approach to open source software.
  - Learn about Apache software (Hadoop, Spark, Mesos, Airavata,...) directly from the developers.
  - Learn how to start your own Apache project
- URL: http://www.apachecon.com/

## EclipseCon

- Three conferences: EclipseCon NA, EclipseCon France, and EclipseCon Europe
- Held in March, June, and October/November
  - Submission deadlines late November, mid-April, and late July
- Collocated with a variety of different conferences
- EclipseCon is about sharing best practices, insights, case studies, and innovations in the Eclipse community, and in the wider world of software development
- Eclipse is widely used for software engineering, and is heavily used for scientific computing
  - Provides both a software development environment and a platform for developing GUIbased applications
  - Newly formed Science Working Group aims to provide a forum for scientific software collaboration
- http://www.eclipsecon.org

TRACK 1: SPRINT Get your hands dirty! Build new things.

TRACK 2: SHARE & HELP Share your progress and help your peers

mozilla

**Festival** 

🍪 Open Science

3 Tracks Helping Research Leverage the Open Web Mozilla Festival November 6 - 8 | London, UK

> TRACK 3: TRAINING Learn new skills and technologies





### Introduction

1. Why Open?

1.1. Working Open Basics

1.2. Open at Mozilla

2. Project Setup

2.1. Lowering Barriers

2.2. Roadmapping

2.3. Legal

2.4. Project Checklist

3. Working with Contributors

3.1. Mechanics of Contributing

### 'Working Open' Project Guide

### DOI 10.5281/zenodo.33748

C FDIT

### Hello There!

\*

-

4

¥

4

-

4

-

\*

-

Welcome to Mozilla Science Lab's Working Open Guide. This guide was created by MSL's core team, along with our broader community, to introduce you to "working open" and provide a framework and resources for running sucessful open science projects. In a nutshell, working openly enables a community of skilled contributors to collaborate and build together, making better, more useful products and research. Sounds great, right?



http://mozillascience.github.io/leadership-training/

### SE4Science Workshop Series http://SE4Science.org/workshops

- Facilitate interaction between SE and CSE
- Held at ICSE, ICCS, and SC
- Discussion Topics
  - Research Software vs. IT Software
  - CSE software quality goals
  - Crossing the communication chasm
  - Measuring impact on scientific productivity
  - Reproducibility of results