Best Practices in Online Training: The Software Sustainability Institute's **Experiences and Lessons Learned**

Dr. Rachael Ainsworth Research Software Community Manager Software Sustainability Institute, University of Manchester



@rachaelevelyn

@rainsworth

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Software Sustainability Institute





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Medical Research Council



Natural Environment **Research Council**



Science and Technology **Facilities Council**



Engineering and Physical Sciences **Research Council**





Economic

and Social







About the Software Sustainability Institute (SSI)

- A national facility promoting the advancement of software in research since 2010, by cultivating better, more sustainable, research software to enable worldclass research: "Better software, better research"
- A collaboration between the universities of Edinburgh, Manchester, Oxford and Southampton.
- Teams: Software, Training, Policy, Community and Outreach
- In 2018, SSI was awarded funding from all seven UK Research Councils.
 - Supported by the UK Research Councils through grants EP/H043160/1, EP/N006410/1 and EP/ S021779/1, with additional project funding from Jisc.













Science and Technology **Facilities Council**

Medical

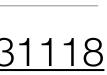
Council

Research

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Research Council





Collaborations Workshop

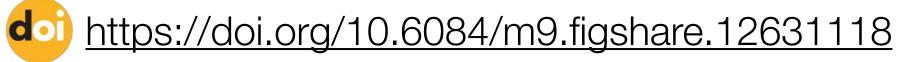
- Bringing together researchers, developers, innovators, managers, funders, publishers, leaders and educators to explore best practices and the future of research software
- Unconference: keynote presentations, miniworkshop/demo sessions, discussion group session, lightning talks, collaborative ideas group session and a hack day
- CW20 took place March 31 April 2, 2020 at Queen's University Belfast, Northern Ireland
- Themes: Open Research, Data Privacy and Software Sustainability (also Scholarly Communication and Community)
- http://bit.ly/ssi-cw20





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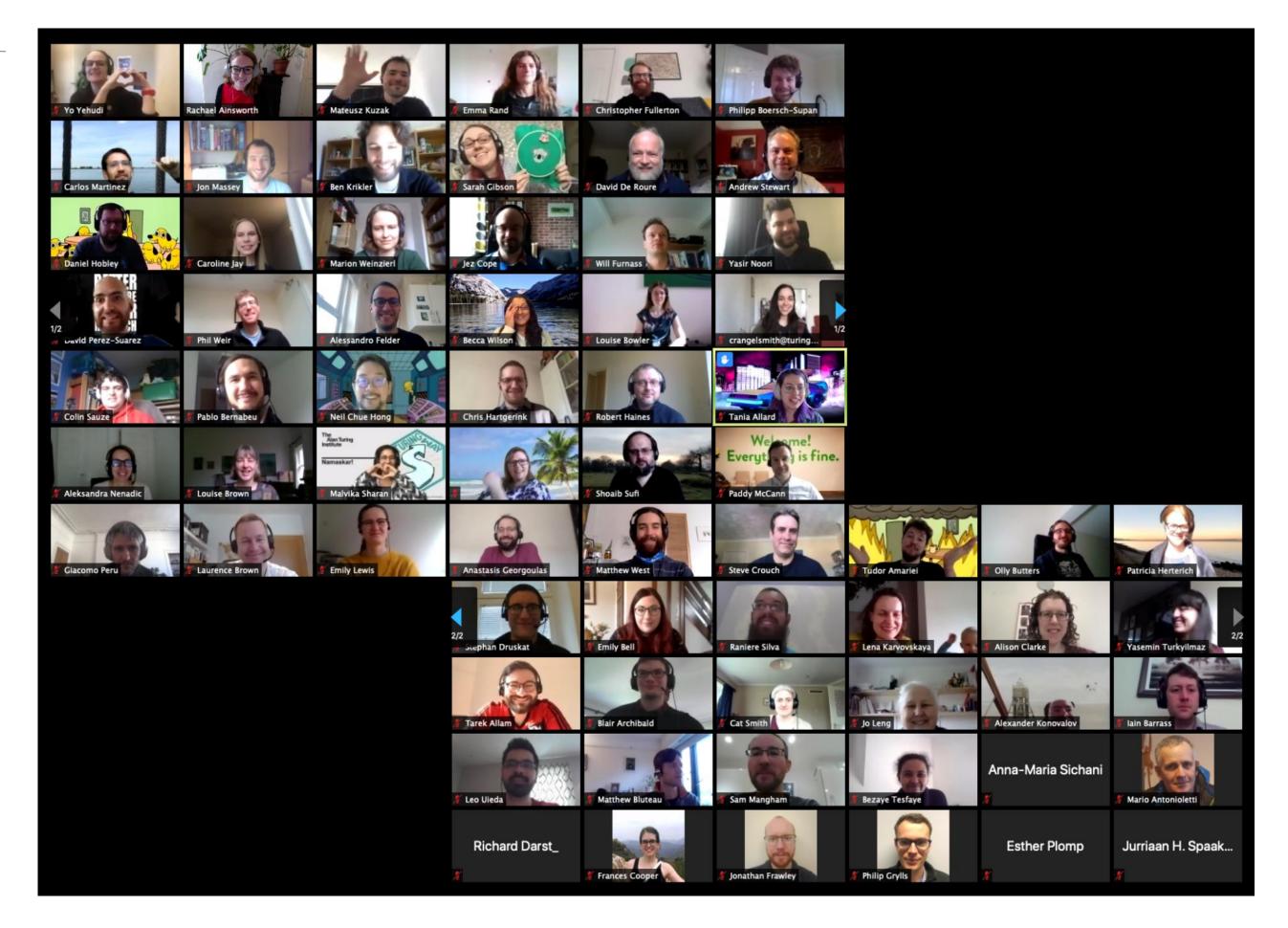
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SSI's online event experience

- Steve Crouch has run afternoon training events online for the Scottish response to the Royal Society RAMP COVID initiative: https://society-rse.org/rses-contributing-to-the-national-covid-19-response-through-ramp/
- Mario Antonioletti, Lucia Michielin, Aleksandra Nenadic and Giacomo Peru have been running Edinburgh Carpentries events online: <u>https://edcarp.github.io/</u>
- Aleksandra Nenadic and Steve Crouch have run and facilitated workshops and instructor training events online: <u>https://carpentries.github.io/instructor-training/</u>
- Shoaib Sufi moved the selection of the SSI Fellows from a face to face meeting to a successful online event which has taken place for a number of years now, and has oversight of Collaborations Workshop
- Rachael Ainsworth delivered Collaborations Workshop 2020 online and organises the SSI Fellows Community Calls: https://www.youtube.com/user/SoftwareSaved
- Our guidance for running online training: https://doi.org/10.5281/zenodo.3923947







Platforms and tools (1/2)

• Video conferencing: Zoom

- Meetings feel closer to an in-person event than a webinar, and empower participants to engage
- Breakout rooms facilitate interaction between participants through icebreakers, group discussions, idea generation, problem solving and/ or experience sharing and are often reported as participants' favourite part of an online event

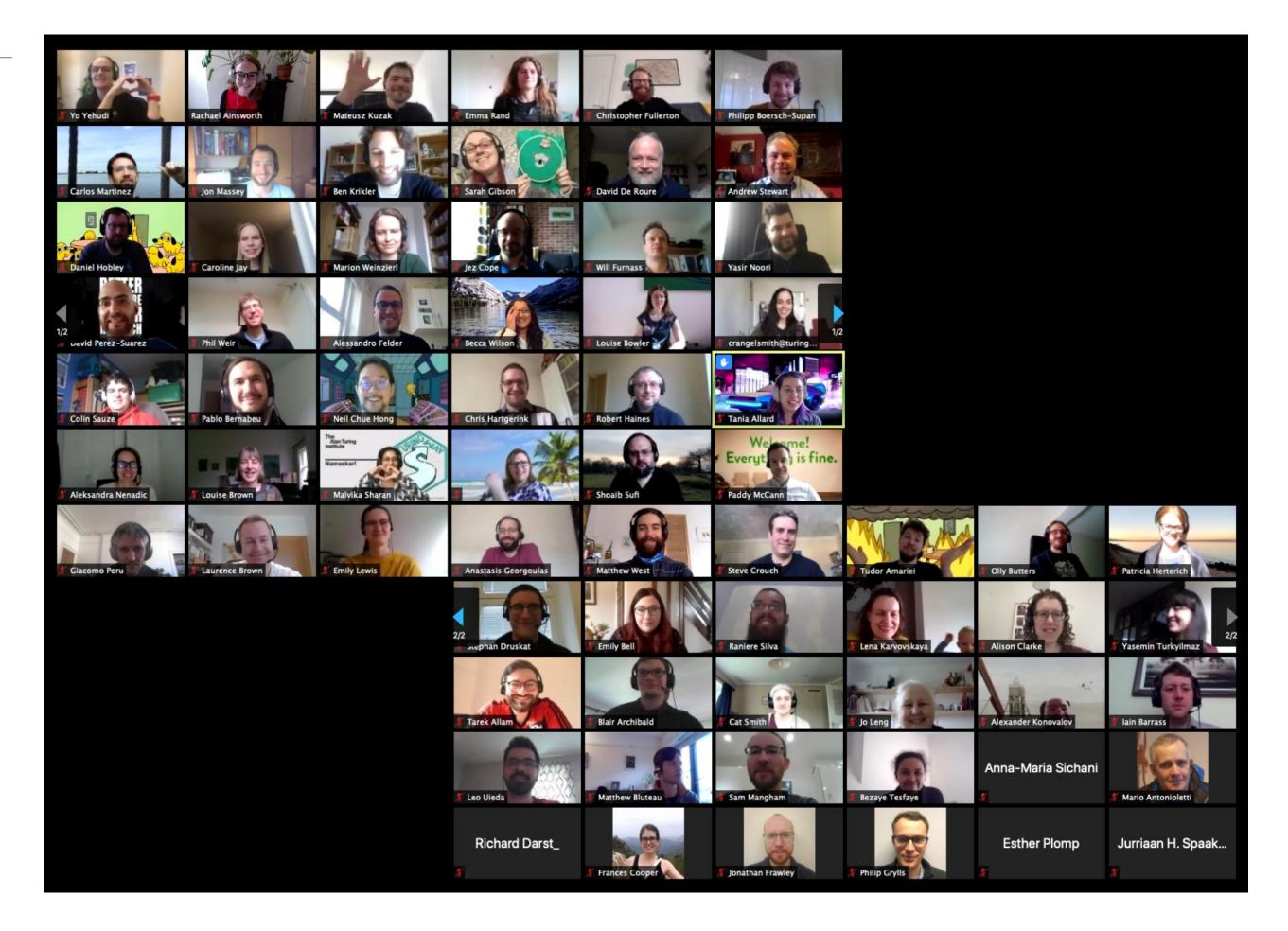
• **Collaborative documenting**: Google Docs

- Used for the agenda, roll call, taking notes, asking questions, and keeping everyone synchronised
- Zero barrier to entry (doesn't require account creation or knowledge of special syntax)
- Up to 100 people can edit and comment at the same time





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Platforms and tools (2/2)

• **Communication channel**: Slack

- A communication channel that persists outside the meeting is helpful for maintaining access to resources shared, referencing discussions and facilitating community engagement
- Combination of practical channels for event organisation/communication (e.g. private channel for organisers, #help-desk) and fun channels to add a more human element to the event (e.g. #pets-at-cw20)

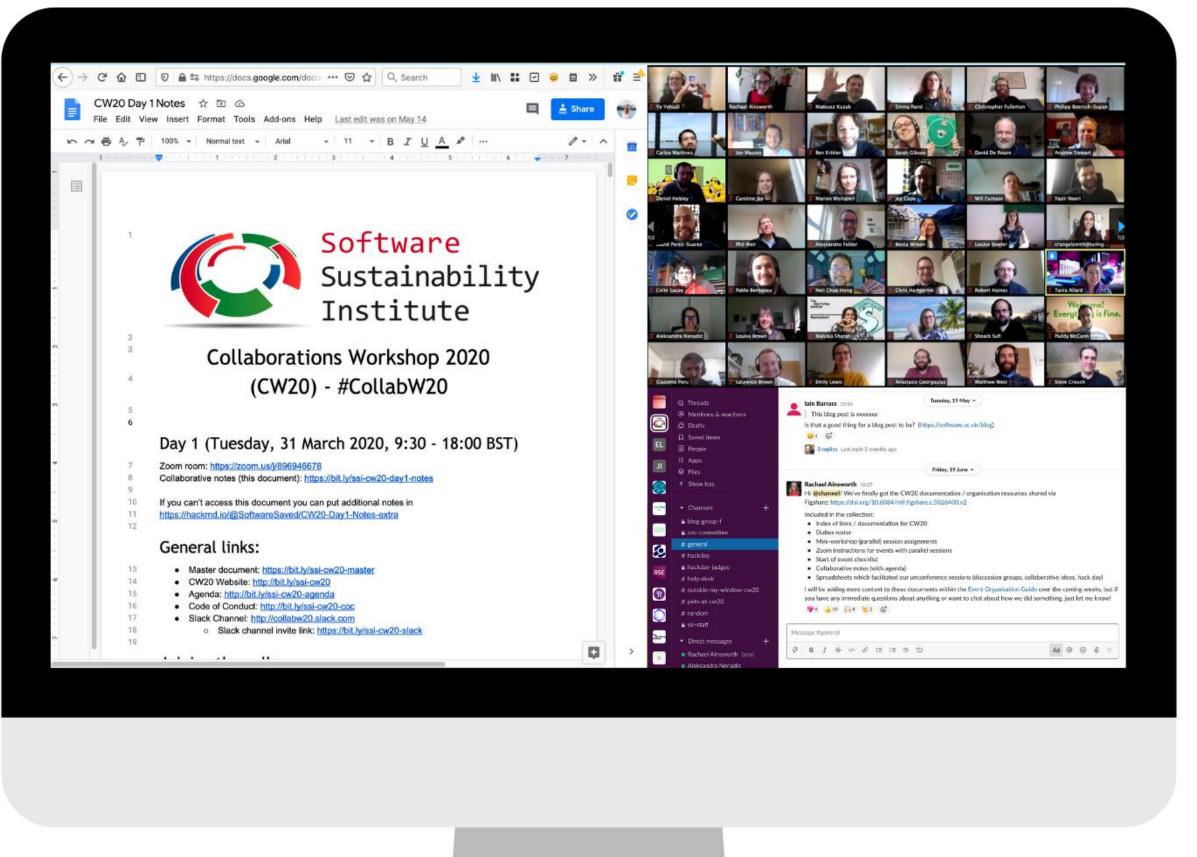
• Physical setup

- Following a screen share (with enough screen real estate to see what is happening), chat, shared documents, etc. can be a real problem
- Provide advice to participants ahead of time so they can get the most out of the event (e.g. good headset, additional monitor, etc.)



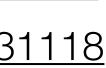








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Online event considerations

- The agenda for an online event must have sufficient breaks for it to be effective and less tiring for participants - In general, shorter blocks and regular breaks are appreciated by participants (e.g. don't go longer than 90 min
 - without a break)
 - Set break times and keep to them to help people make arrangements around the event and manage expectations (e.g. caring responsibilities)
- Things will take longer
 - Factor in extra time to complete tasks, go through training material and solve technical problems
 - Creating and managing breakout rooms also adds extra time to the event
- Have learners at a similar skill level at the workshop to help get the pace right
 - Use a pre-workshop survey to gather learners' backgrounds and gauge their current skill levels
- Be intentional with your Code of Conduct and adapt it for the online event
 - Always provide a reporting procedure and include interactions within online communication channels in the CoC





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Roles and responsibilities

- Assign an event facilitator as a designated role.
 - It can be tiring and time consuming for the active instructor to monitor the chat, non-verbal feedback from participants and documents while they are presenting
 - An event facilitator can manage the participants and bring attention to issues, freeing up the instructor to instruct and the helpers to focus on helping
- Get the instructor/helper to learner ratio right
 - As a rule the ratio of one instructor/helper to four or five learners works well for online
- Have a pre-event rehearsal for the delivery team to make sure everyone has the correct setup/settings enabled, practice with the platforms that will be used, and understand roles and responsibilities
- Have a pre-event meeting or office hours for presenters and participants to provide an opportunity to test their tech, troubleshoot any installation issues, and ask any questions







Security, permissions and data privacy

- Mitigate security risks by requiring registration, enabling a meeting room password, and/or using a waiting room - Make clear to participants which information should not be shared (e.g. don't share links to meeting room or
 - notes on social media)
- Get permission from participants
 - If you are going to use or publish notes and resources created at the event, then it's important to let participants know about this before you start: provide an appropriate privacy policy at registration
 - If you are going to take any screenshots during the event or record the event, it's important to let participants know and give them the option of turning their cameras off
- Give permission to participants
 - Empower participants to edit the collaborative notes document, raise issues, and directly interrupt so that problems do not linger
 - For multi-day events, it can be useful to capture what learners feel is working well and what needs improving as feedback in the shared document at the end of the day so that instructors can adapt







Resources

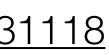
- Guidance for running online training: <u>https://doi.org/10.5281/zenodo.3923947</u>
- CW20 Figshare portal: <u>https://cw20.figshare.com/</u> Shared CW20 documentation and infrastructure resources
- CW20 blog posts: <u>https://software.ac.uk/tags/collaborations-workshop-2020</u>
- CW20 session recordings: <u>https://www.youtube.com/user/SoftwareSaved</u>
- CSCCE's Virtual Event Guide (coming 22 July 2020): <u>https://www.cscce.org</u>
- CarpentryCon@Home session on Challenges and opportunities in transitioning meetings online (5 August 2020 at 17:00 UTC): https://2020.carpentrycon.org/schedule/#session-57











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Dr. Rachael Ainsworth, SSI





