

# **Better Scientific Software (BSSw) Fellowship**Statement of Work, Milestones and Guidelines 2021-2022 Period of Performance

Personal Information (as it should appear on https://bssw.io/pages/meet-our-fellows)		
Name	Amy Roberts	
Organization	University of Colorado Denver	
Title, Dept	Assistant Professor, Department of Physics	
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Other URLs	https://clas.ucdenver.edu/physics/amy-roberts-phd	

Project Description (as it should appear on https://bssw.io/pages/meet-our-fellows)		
BSSw Focus Area(s)	Better Development; Subtopic: Revision Control Better Skills; Subtopic: Personal Productivity and Sustainability	
IMPACT TAG-LINE (short statement, see https://bssw.io/pages/meet-o ur-fellows for examples under each Fellow's name, e.g. Jeff Carver - Improving code quality through modern peer code review)	Enabling collaborative work on scientific software through accessible, user-focused version control tutorials	
ABSTRACT (paragraph, see https://bssw.io/fellows/ignaci o-laguna for example)	Version control is an essential tool for collaborative work on software, but domain scientists lack the knowledge they need to contribute to these efforts. There are often only a handful of developers who have the skills needed to work collaboratively on software and this limits the sustainability of software efforts that are increasingly crucial to their communities. Existing version control training materials focus either on the underlying theory or a comprehensive overview of version control. Such material can be inaccessible to new developers if they cannot identify what information is applicable to their specific problem.  Amy is developing accessible, user-focused tutorials on version control that give scientists the information they need to contribute to shared software. The version control tutorials will center around	

common user stories and directly address how a scientist should interact with version control to work collaboratively in common science scenarios. Art that illustrates broader ideas will be commissioned and tested along with the tutorials to help new users translate everyday concepts into the equivalent version control terminology.

## BIO

(paragraph, see <a href="https://bssw.io/fellows/ignacio-laguna">https://bssw.io/fellows/ignacio-laguna</a> for example)

Amy is an assistant professor of physics at the University of Colorado Denver where she leads a research group focused on dark matter detection. She searches for dark matter signals and works to build accessible computing ecosystems. Amy also serves as an editor for the Journal of Open Source Software and believes that complete, usable software infrastructure - together with accessible training and documentation - are necessary for a successful and equitable scientific community.

# **Project Plan & Milestones**

# **Detailed Approach**

(based on original proposal)

The Principle Investigator, Amy Roberts, is responsible for making version control training materials that focus on user stories. This project aims to improve functional knowledge of version control in the scientific community. The project plan includes (1) developing story-based, interactive lessons, (2) commissioning art that maps common version control situations onto everyday concepts and making them publicly available, and (3) improving these materials with group testing. The PI will complete three milestone activities described below:

### **Contract Milestones:**

BSSw Fellowship funds will be disbursed in accordance with achieved milestones via a subcontract from the Krell Institute. Milestones should include some deliverable or evidence of completion and will be included in your Statement of Work. Refer to the examples below to help guide your specific milestone descriptions.

 Milestone 1: Written report with plan of record for content delivery to community and up-to-date progress.

Amount: 25% of contract
Target deadline: April 1, 2021

Milestone 2: Delivery/presentation of content to community (e.g., conference, workshop, etc.) and in the form of an HPC Best Practices webinar.

**Amount:** 50% of contract

Target deadline: December 1, 2021

• **Milestone 3:** Contribution to <u>BSSw.io</u> in the form of an authored blog or article based on your fellowship work. Use <u>Contribute to BSSw</u> for content guidance.

Amount: 25% of contract Target deadline: March 31, 2022		
Milestone 1	Written report with plan of record for content delivery to community and up-to-date progress. This plan will include: user stories, art identified, and licensing. This plan will also identify appropriate webinars for milestone 2, with the goal of discussing lessons learned in transferring theory to practice.  Amount: 40% of contract  Target deadline: May 1, 2021	
Milestone 2	Delivery/presentation of content to community (e.g., conference, workshop, etc.) and in the form of an "HPC Best Practices" webinar.  Amount: 50% of contract  Target deadline: December 1, 2021	
Milestone 3	Contribution to BSSw.io in the form of an authored blog or article based on your fellowship work. Use "Contribute to BSSw" for content guidance.  Amount: 10% of contract Target deadline: March 31, 2022	

<b>Expectations &amp; Guidelines</b> Read the guidelines and expectations for being a BSSw Fellowship recipient.		
Acknowledge BSSw in Your Funded Work	Please use the following acknowledgement in full: This work was supported by the Better Scientific Software Fellowship, supported by the National Science Foundation under Grant No. (2112558).  Except for articles or papers published in scientific, technical or professional journals, the following disclaimer must be included:	
	"Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."	
Seek Communications Approval	Our sponsors must clear any communications/articles about the BSSw Fellowship that you or your home institution may want to publish: Please send a draft of any article to Hai Ah Nam (hnam@lanl.gov) prior to publication. We will then clear content with our sponsors to ensure that the article meets guidelines.	
Be Mindful of Logo Use	Use of the <u>Better Scientific Software logo</u> in conjunction with your fellowship activities is encouraged. Use of other logos (NSF, DOE, ECP, IDEAS Productivity project) is not appropriate for this work.	

Engage with Sponsor R&D Communities	Attend the BSSw Fellowship Program annual meeting, currently co-located at the Exascale Computing Project annual meeting. Continue to engage with the DOE and NSF community throughout your fellowship term.
Additional Policies	Adhere to NSF Proposal & Award Policies & Procedures Guide (NSF-20-1)