Appendix A. Call For Papers

The full Call for Papers for WSSSPE1 can be found online at http://wssspe.researchcomputing.org.uk/wssspe1/cfp/. We include below the part that explains scope and topics for which submissions were solicited (see §2 for number of submissions received, accepted, and the corresponding process).

"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 scientists, 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. This workshop will provide a forum for discussion of the challenges, including both positions and experiences. The short papers and discussion will be archived as a basis for continued discussion, and we intend the workshop to feed into the collaborative writing of one or more journal publications.

In practice, scientific software activities are part of an ecosystem where key roles are held by developers, users, and funders. All three groups supply resources to the ecosystem, as well as requirements that bound it. Roughly following the example of NSF's Vision and Strategy for Software [2], the ecosystem may be viewed as having challenges related to:
- the development process that leads to new (versions of) software
  - how fundamental research in computer science or science/engineering domains is turned into reusable software
  - software created as a by-product of research
  - impact of computer science research on the development of scientific software and vice versa
- the support and maintenance of existing software, including software engineering
  - governance, business, and sustainability models
  - the role of community software repositories, their operation and sustainability
- the role of open source communities or industry
- use of the software
  - growing communities
  - reproducibility, transparency needs that may be unique to science
- policy issues, such as
  - measuring usage and impact
  - software credit, attribution, incentive, and reward
  - career paths for developers and institutional roles
  - issues related to multiple organizations and multiple countries, such as intellectual property, licensing, etc.
  - mechanisms and venues for publishing software, and the role of publishers
- education and training

This workshop is interested in all of the above topics. We invite short (4-page) position/experience reports that will be used to organize panel and discussion sessions. These papers will be archived by a third-party service, and provided DOIs [Digital Object Identifiers]. We encourage submitters to license their papers under a Creative Commons license that encourages sharing and remixing, as we will combine ideas (with attribution) into the outcomes of the workshop. An interactive site will be created to link these papers and the workshop discussion, with options for later comments and contributions. Contributions will be peer-reviewed for relevance and originality before the links are added to the workshop site; contributions will also

be used to determine discussion topics and panelists. We will also plan one or more papers to be collaboratively developed by the contributors, based on the panels and discussions."