

Department of Engineering Physics

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Mr. Josh Greenberg Alfred P. Sloan Foundation 630 Fifth Avenue, Suite 2550 New York, NY 10111

July 26, 2012

Dear Mr. Greenberg,

I am writing in strong support of the proposal being put forward by the Mozilla Foundation and Software Carpentry to develop training materials and conduct workshops that will strengthen the computing skills of scientists, and result in a self-sustaining learning community that will support the ongoing development of those skills.

As an Associate Professor of Nuclear Engineering, I lead the Computational Nuclear Engineering Research Group (CNERG) at the University of Wisconsin-Madison. All of my research relies upon graduate students who are able to contribute to software development projects. While I certainly want them to be able to contribute as soon as they join my group, I am also concerned with the quality of those contributions so that they survive as enduring parts of a growing software basis. The community and materials provided by Software Carpentry helps in both respects. I routinely direct students to the Software Carpentry materials before they begin their graduate student careers, with the expectation that they have begun to develop those skills before they even arrive. I then return to those materials routinely, both for my own continuing development as a computational scientist, and for the professional development of my students.

I have also worked here at the UW-Madison to develop informal learning communities to support the development of these skills, inspired in a large part by the Software Carpentry presentations and curriculum available online. In my experience, these skills are not learned efficiently by simply exposing students to them in a research group environment. Rather, a more intentional educational experience is important, even though it is rarely available for credit. Once these skills are learned, these student-scientists are both more productive in supporting traditional scientific software development, and have the basis to explore more creative approaches.

I look forward to an opportunity to collaborate with and support this proposal. In recent years, I have been personally involved with organizing workshops (or "boot camps" as we often refer to them) and have enjoyed both instructing and learning in those peer-to-peer environments. A number of my students have also become active contributors to the Software Carpentry community as boot camp organizers and instructors. I will continue to incorporate the curriculum and instruction model into the routine management of my research group, and begin adding aspects to my formal courses, in pursuit formal recognition of this training as part of the educational experience of graduate students at the University of Wisconsin-Madison.

Sincerely,

Paul P.H. Wilson

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