



College of Engineering
UNIVERSITY OF WISCONSIN-MADISON

Department of Engineering Physics

Paul P.H. Wilson
419 Engr Research Bldg
1500 Engineering Dr
Madison, WI 53706

Associate Professor
Phone: +1.608.263.0807
Fax: +1.608.263.0807
wilsonp@engr.wisc.edu

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

August 30, 2011

Dear Mr. Greenberg,

I am writing in strong support of the proposal being put forward by the Mozilla Foundation and Software Carpentry to develop 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. As much as I try to select for students with strong computing skills, incoming graduate students are routinely lacking in their ability to contribute effectively to my work until they have upgraded their skills. I have 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. I am the faculty advisor for "The Hacker Within" [THW] student organization, founded at UW-Madison to achieve similar aims. Organized entirely by the students, THW has held multi-day bootcamps on a number of topics important for scientific computing, including one based to some degree on the Software Carpentry curriculum, and sent representatives to other institutions to share this model. I look forward to the development of a more formal curriculum and model so that I can pursue 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