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Josh Greenberg
Alfred P. Sloan Foundation
630 Fifth Avenue
Suite 2550
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Dear Mr. Greenberg:

As a researcher and instructor working at the boundary between computer science, mathematics, science and engineering, I enthusiastically support the proposal being put forward by the Mozilla Foundation and Software Carpentry to create packaged workshops and an online learning community designed to help scientists (and I hope researchers in engineering) manage their use of software.

I have never met a graduate supervisor who would consider turning a student loose in a lab, at a conference presentation, or with a manuscript submission without careful mentoring and monitoring of what that students was doing; however, almost all supervisors (myself included) do exactly that when it comes to developing, modifying, maintaining and using software in research, particularly when that software is initially intended only for a single student. Said student struggles to automate, debug and extend their analysis process over the subsequent years, wasting time learning through trial and error. But at some point—all too often just as the student approaches graduation—it becomes apparent that the resulting system is fragile, buggy, and almost impossible for anybody else to use.

I should make it clear that this problem occurs even among some graduate students with computer science undergraduate degrees. I conjecture that undergraduate students are not given enough practice managing small-scale but long-term design, use, and maintenance of software. It is for teaching these skills that I find the current Software Carpentry material most effective. I am also pleased to see that the proposal includes the addition of more best-practices material, to show students how to get the most out of the skills and tools that they are learning.

I plan to use the current incarnation of the Software Carpentry website as part of a one-term graduate course on the broader topic of reproducible research in the spring of 2012; however, taking such a course represents a significant investment for graduate students, especially for those who are only discovering the importance of these skills after their major coursework is complete and they are fully engaged in research. As a consequence, I am intrigued by this proposed alternative model of delivery, and I hope to work with the team to make it available as a viable lightweight alternative for graduate students at UBC.

Sincerely yours,

Ian Mitchell