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

I am writing to support the proposed workshops put forward by the Mozilla Foundation and *Software Carpentry*. I am an academic computer scientist (originally trained in applied mathematics) at the University of Ontario Institute of Technology (UOIT).

Unfortunately, I am painfully aware of the deficiencies in the computing skills of many non-computer science graduates from when I completed my own mathematics degrees. In the past, I foolishly upheld the view of computing as a low-level skill that can and should be learned without instruction. Contrary to assumptions implicit in the culture of mathematicians and physicists, it is rarely effective to teach oneself intelligent use of the web and modern scientific software tools on the fly. When I had to start managing large libraries of legacy code as a computer science doctoral student, I became aware of my own computational ignorance and of the substantial advances of computer science.

My personal experience is consistent with studies showing that self-taught scientific programmers are largely unaware of modern software tools that can improve their productivity. My earlier misconceptions persist among many other scientists; this is precisely why it is important to support the proposed workshops. It is vital to foster a new generation of computationally knowledgeable scientists who can engage with new kinds of data-intensive problems that are increasingly common in science.

To this end, my colleagues and I at UOIT are in the process of adopting a subset of the *Software Carpentry* course into our graduate High-Performance Computing class. We would also happily host a more intensive bootcamp at UOIT and encourage our graduate students to participate in any follow-up online activities. As a young institution, it is not too difficult for us to find ways to grant students academic credit for participation in such workshops as part of our graduate programs in Modelling and Computational Science. For instance, I recently ran *Software Carpentry* as a graduate reading course in the winter of 2011 for several of our students. The skills gained (notably in the use of version control systems) have been invaluable for me and my students in improving our workflow.

If you have not looked at the *Software Carpentry* site (`software-carpentry.org`) to see the course Dr. Wilson has developed, I strongly recommend doing so. There are many very practical teaching resources there, but, to deliver the course well and get the word out, some further impetus is required. Supporting these workshops is crucial so that this much-needed expertise can propagate effectively to faculty and students at all levels, thereby preparing scientists better for addressing contemporary computational challenges in both academic and industrial contexts.

Yours faithfully,

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