

Mr. Josh Greenberg
Sloan Foundation
630 Fifth Ave, Suite 2550
New York, NY, 10111

Dear Mr. Greenberg,

I work as a Senior Research and Instrument Analyst at the Space Telescope Science Institute (STScI). At STScI I am part of the COS+STIS team that oversees the operations and calibration of the two spectrographs on-board the Hubble Space Telescope: the Cosmic Origins Spectrograph (COS) and the Space Telescope Imaging Spectrograph (STIS). As part of the COS+STIS team I write software to create reference files which assist in the reduction of COS and STIS data. Additionally, I oversee the calibration pipeline for the team.

Greg Wilson came to STScI in January 2012 to teach a 3 day Software Carpentry Bootcamp. For 5 weeks following his visit, he hosted a weekly online tutorial and assigned homework to be completed during the week. The Software Carpentry Bootcamp and its subsequent tutorials have had a profound impact on my work personally, and the procedures I implement for the COS+STIS team as the coordinator of the calibration pipeline. For my personal code I have begun to write short functions that can be used in succession rather than one long code. This has enabled me to reuse more code, create more flexible code, and find and fix bugs faster. As the coordinator of the calibration pipeline for the COS+STIS team I supervise the creation and implementation of reference files and routine monitoring of the COS and STIS instruments. Following the Software Carpentry Class, I began work with a colleague to implement version control (via SVN) for all software related to the production of reference files and monitoring. The code repository that we have created has already improved the transition of a project from one person to another, the ease of collaboration on a project, and the tracking of code changes.

Last month Greg asked me to become a Software Carpentry tutor and I jumped at the opportunity. Often “good coding practices” are taught without much thought to the practicality of their implementation in a demanding workplace. I believe that Software Carpentry presents realistic coding practices based on both real world experience and research that can be implemented simply and universally to all disciplines. I am eager to contribute my knowledge and experience to this program.

Sincerely,
K. Azalee Bostroem
bostroem@stsci.edu
410-338-4459