

Abstract Submitted  
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**Student Internships: a low-risk, high-yield learning experience**

CATHERINE SCHIBER, Texas State University-San Marcos — Internships can be valuable in increasing confidence in learning new skills and techniques for real world research. I did a ten-week internship program at Oak Ridge National Laboratory (ORNL) for the Department of Energy (DOE) through the Science Undergrad Laboratory Internship (SULI) program. I was assigned to the Spallation Neutron Source (SNS) division, where I worked peripherally on an accelerator. Within SNS, I was in the Research Accelerator Division (RAD), which worked with the accelerator beam before it hit the target and spalled neutrons. The first part of my project involved collecting and managing a database of possible accelerator beam size changes by solving a pre-existing model. The second part was putting that database into an interpolation program. However, I had no programming experience, and therefore had to learn on the job. I learned Jython by reading books, doing online tutorials, and asking occasional questions. By the end of the project, I had written a program in both Jython and JRuby that included a graphic user interface (GUI) and customized error messages. Therefore, I encourage all students to partake in an internship, even if it is not in their field of expertise.

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