Jon Miller

Summary

Skilled researcher with strong mathematical background and vast experience in modeling and analysis of experimental data, including software development for handling large datasets. Now interested in gaining real-world experience in (fill in) fields, suitable for my abilities.

Education

2009 PhD in Experimental Nuclear Physics
University of Maryland, College Park MD

2002 BA in Mathematics and Honors Physics
Gustavus Adolphus College, St. Peter MN
Wrote honors thesis and awarded scholarship.

Work Experience

Since 2005 **Graduate Research Asst.** in the University of Maryland

Analysis expert for large experiment in the field of neutron physics, which is the ground for my dissertation. Including:

Handling and array of 400 units of physical equipment (commissioning, calibration, safety procedures, troubleshooting).
Co-Writing analysis software in ROOT\C++, which analyzes large amounts of data; working with custom hardware for reading data from the 400 sensors.
Developed techniques for analyzing the data and interpreting the experiment results within theoretical models.

Published scientific publications in peer reviewed journals and gave public presentations in peer conferences

1999 - 2005 **Teaching Asst.** in the U. of Maryland and Gustavus Adolphus College.

Instruction of undergraduate students in a frontal setting as well as hands-on laboratory setting.
Experience in writing different types of documentation (technical solutions, theoretical, howtos).

Skills

- ROOT/C++ , FORTRAN development as well as MySQL experience in Windows and Linux environments. Handling massive amounts of data, and addressing custom hardware drivers.
- Mathematical analysis and problem solving, including using ROOT, Mathematica, Maple, Mathcad etc.
- Easily acquainted with custom hardware equipment. Experience in analog, digital and nuclear electronics.