Daniel Abercrombie

1528 Daugherty's Run Rd, Linden, PA 17744
(570) 777-0685, abercrombie@psu.edu

EDUCATION

B.S., Physics (with Honors); *B.S.,* Nuclear Engineering
Minor in Mathematics
The Pennsylvania State University, University Park, PA
Expected Graduation: May 2014
GPA: 4.00/4.00

EXPERIENCE

European Organization for Nuclear Research — Meyrin, Switzerland
Summer Student — Summer 2013

- Conducted research under the JetMET Algorithms and Reconstruction group of the CMS detector
- Compared resolution and stability of jet grooming algorithms and cone sizes
- Simulated p_T distribution of gluon jets resulting from event pileup

Penn State Dept. of Mech. and Nuclear Engineering — University Park, PA
Grader, NucE 310W: Issues in Nuclear Engineering — Fall 2013

- Evaluated students' understanding of challenges in nuclear energy industry
- Provided writing instruction

Research Assistant, Intense Laser Lab — Spring 2012 - Summer 2013

- Designed and constructed a laser compressor
- Modeled radiation transport using Geant4 and MCNP
- Optimized high energy X-ray generation for active interrogation
- Built interface to control lab equipment using LabVIEW

Research Assistant, Advanced Multiphase Flow Lab — Fall 2011

- Learned theory and construction techniques of conductivity probes
- Acquired data used to validate three dimensional CFD code

PSUKnowHow — State College, PA
Private Tutor — Fall 2011

- Taught physics and engineering concepts to engineering students
- Presented topics in multiple ways to help student comprehension

COMPUTER SKILLS

C++	ROOT	MATLAB	SolidWorks
Fortran	Geant4	LabVIEW	HTML
Python	MCNP	Mathematica	Bash

ACTIVITIES

American Nuclear Society: Penn State Student Chapter — 2011 - Present
Technical Lead for ANS 2014 Student Conference at Penn State
Vice President, Fall 2012 - Spring 2013
Outreach Volunteer, Spring 2011 - Present

HONORS & AWARDS

2013 Astronaut Scholarship Foundation Award
2013 American Nuclear Society National Student Conference
Best Undergraduate Presentation in Reactor Physics
2013 College of Engineering Research Symposium Poster Award
2013 Evan Pugh Scholar Award
2012 DOE's Nuclear Energy University Programs Scholarship
2012 American Nuclear Society's Accelerator Applications Division Scholarship