Daniel Hellfeld

CONTACT

Lawrence Berkeley National Laboratory   1.949.680.9345
1 Cyclotron Rd. (B50 - 4036R)   dhellfeld@berkeley.edu | dhellfeld@lbl.gov
Berkeley, CA 94720   dhellfeld.github.io | linkedin.com/in/dhellfeld

OBJECTIVE

To conduct scientific research in the field of nuclear engineering, specifically in the areas of radiation detection and imaging with applications in nuclear security and safeguards.

EDUCATION

Doctor of Philosophy (PhD), Nuclear Engineering (4.0/4.0)   **Aug 2015 - Present**
University of California, Berkeley   *Berkeley, CA*

Master of Science (MS), Nuclear Engineering (4.0/4.0)   **Aug 2013 - May 2015**
Texas A&M University   *College Station, TX*

Bachelor of Science (BS), Physics (3.89/4.0)   **Sep 2009 - Jun 2013**
University of California, Santa Barbara   *Santa Barbara, CA*

RESEARCH EXPERIENCE

NSSC Graduate Research Fellow   **Nov 2014 - Present**
Nuclear Science and Security Consortium, UC Berkeley   *Berkeley, CA*

Graduate Student Intern   **Jun 2015 - Jul 2015**
Rare Event Detection, NACS, Lawrence Livermore National Laboratory   *Livermore, CA*

Graduate Student Intern   **Jun 2014 - Aug 2014**
Rare Event Detection, NACS, Lawrence Livermore National Laboratory   *Livermore, CA*

Graduate Research Assistant   **Sep 2013 - Nov 2014**
Department of Nuclear Engineering, Texas A&M University   *College Station, TX*

TEACHING EXPERIENCE

Lecturer   **Jan 2018 - May 2018**
Department of Nuclear Engineering, UC Berkeley   *Berkeley, CA*

Lab Instructor   **Sep 2014 - Dec 2014**
Department of Nuclear Engineering, Texas A&M University   *College Station, TX*

Math/Physics Tutor   **Jan 2013 - Mar 2013**
Campus Learning and Assistance Services, UC Santa Barbara   *Santa Barbara, CA*

SCIENTIFIC COMPUTING SKILLS

Languages:	Python, C++, C, bash, XML
Mathematical/Analysis Software:	ROOT, Mathematica, Matlab
Monte Carlo Particle Transport Software:	Geant4, MCNP5/X, Serpent
Nuclear Burnup Software:	ORIGEN2, CINDER-90, TransLAT
Gamma Spectroscopy Software:	GENIE-2000, MAESTRO, GammaVision, PeakEasy
Build Systems:	make, CMake
Operating Systems:	macOS, Linux (Ubuntu), Windows
Databases:	HDF5, SQL
Documentation:	Doxygen, Sphinx
Version Control:	git
Other Software:	LaTeX, MS Office

AWARDS

Runner-up NSS Student Paper Competition, IEEE NSS-MIC	**Oct 2017**
Valentin T. Jordanov Rad. Instrum. Travel Grant, IEEE NSS-MIC	**Aug 2017**
Best Oral Presentation, University Program Review Meeting	**Jun 2017**
JD Williams Best Poster Award, INMM Annual Meeting	**Jul 2015**
Nuclear Science and Security Consortium Fellowship, UC Berkeley	**Nov 2014**
Graduate Enhancement Fellowship, Texas A&M University	**Aug 2013**
Highest Academic Honor Award, UC Santa Barbara, Physics Dept.	**May 2013**
Highest Honors, UC Santa Barbara	**May 2013**