

# Kathryn D. Huff

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CONTACT INFORMATION	Department of Nuclear Engineering, University of California, Berkeley Postdoctoral Scholar, <i>Nuclear Science and Security Consortium</i> Data Science Fellow, <i>Berkeley Institute for Data Science</i>	mobile: (281) 734-1342 e-mail: kathyhuff@gmail.com website: kathyhuff.github.com
RESEARCH INTERESTS	Advanced nuclear reactors and fuel cycles, scientific computation, sustainable energy systems, waste management, computational systems analysis.	
EDUCATION	<b>University of Wisconsin</b> , Madison, WI <i>Doctor of Philosophy</i> NUCLEAR ENGINEERING <b>University of Chicago</b> , Chicago, IL <i>Bachelor of Arts and Sciences</i> PHYSICS	<b>Aug 2008 – Aug 2013</b> <b>Aug 2004 – June 2008</b>
HONORS AND AWARDS	Data Science Fellowship, Berkeley Institute for Data Science, UC Berkeley. Nuclear Science and Security Consortium Postdoctoral Fellowship. DOE Office of Science Laboratory Graduate Appointment, Argonne, IL. Roy G. Post Foundation Nuclear Waste Management Graduate Scholarship. John Randall Memorial Scholarship, American Nuclear Society FCWMD. J.A. McDeavitt Scholarship, University of Chicago, Chicago, IL. University Scholar Award, University of Chicago, Chicago, IL. Los Alamos Distinguished Student Performance Award, Los Alamos, NM.	<b>2014–2016</b> <b>2013–2016</b> <b>2011–2013</b> <b>2011</b> <b>2009</b> <b>2007–2008</b> <b>2004 – 2008</b> <b>2004</b>
RESEARCH EXPERIENCE	<b>University of California - Berkeley, NE Dept.</b> , Berkeley, CA <i>Postdoctoral Scholar, Nuclear Science and Security Consortium</i> <i>Data Science Fellow, Berkeley Institute for Data Science</i> Developing computational tools and multiphysics models for advanced reactor safety analysis. <b>Argonne National Laboratory</b> , Argonne, IL <i>Laboratory Graduate Research Appointee, Used Fuel Disposition Campaign</i> Developed a used fuel disposition and generic repository computational model. <b>University of Wisconsin - Madison, NEEP Dept.</b> , Madison, WI <i>Graduate Research Assistant, Computational Nuclear Engineering Research Group</i> Developed and applied CYCLUS, a nuclear fuel cycle systems analysis tool. <b>Idaho National Laboratory</b> , Idaho Falls, ID <i>Graduate Research Assistant, Systems Analysis Campaign</i> Developed software functions and requirements for the Fuel Cycle Simulator concept. <b>Kavli Institute For Cosmological Physics</b> , Chicago, IL <i>Research Assistant, Laboratory for Astrophysics and Space Research</i> Programmed & machined instrumentation. Planned protocol for QUIET polarimeter calibration. <b>Universidad de Chile, Physics Dept.</b> , Santiago, Chile <i>Research Assistant, Chicago-Chile Research Exchange Program</i> Constructed and operated a far from equilibrium granular materials experiment. <b>Los Alamos Neutron Science Center</b> , Los Alamos, NM <i>Research Assistant, LANSCE-3</i> Applied digital filtration algorithms and MCNPX models to experimental data.	<b>Sept 2013 – Present</b> <b>Aug 2014 – Present</b> <b>June 2011 – Aug 2013</b> <b>June 2008 – Aug 2013</b> <b>June – Aug 2010</b> <b>Jan 2005 – June 2008</b> <b>June – Sept 2006</b> <b>June – Sept 2004</b> <b>May – Aug 2003</b>
SCIENTIFIC COMPUTING SKILLS	<b>Languages</b> <b>Build Systems</b> <b>Test Frameworks</b> <b>Version Control</b> <b>Nuclear</b> <b>Other Tools</b>	bash/csh, C, C++, FORTRAN, Perl, Python, SQL, XML. automake, CMake, distutils, make. CTest, GoogleTest, nose, unittest. cvs, git, hg, svn. Cyclus, MCNP5/6/X, MOOSE, ORIGEN, PyNE, Serpent, VISION. Doxygen, GoldSim, HDF5, L <sup>A</sup> T <sub>E</sub> X, MathCAD, Mathematica, MatLab, Sphinx.
PROFESSIONAL SERVICE	<b>Secretary</b> , Young Members Group, American Nuclear Society (ANS). <b>Secretary–Treasurer</b> , Fuel Cycle & Waste Management Division, ANS. <b>Technical Program Co-Chair</b> , SciPy, Scientific Python Conference. <b>Moderator, Organizer, Panelist</b> , inSciight Scientific Computing Podcast. <b>Editor</b> , Proceedings of SciPy Scientific Python Conference. <b>Co-Founder</b> , Nuclear Pride, LGBTQA Organization. <b>Co-Founder, Treasurer, President</b> , Hacker Within Scientific Computing Group.	<b>2013–2015</b> <b>2013–2015</b> <b>2013–2014</b> <b>2011–2013</b> <b>2013</b> <b>2011–2013</b> <b>2008–2011</b>