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Professional Preparation

- Ph.D. 2012 Nuclear Engineering Texas A&M University, College Station, TX
- M.S. 2009 Nuclear Engineering Texas A&M University, College Station, TX
- B.S. 2006 Nuclear Engineering Texas A&M University, College Station, TX

Professional Experience

- 2014 – present Research and Development Staff, Oak Ridge National Laboratory
- 2012 – 2014 Postdoctoral Research Associate, Oak Ridge National Laboratory
- 2010 Research Practicum, Lawrence Livermore National Laboratory
- 2008 Research Internship, Sandia National Laboratories
- 2006 Research Internship, Sandia National Laboratories
- 2005 Research Internship, Sandia National Laboratories
- 2004 Research Internship, Sandia National Laboratories

Selected Honors and Awards

- 2016 Knoxville Business Journal 40 Under Forty Recipient
- 2016 R&D 100 Award for Virtual Environment for Reactor Applications (team)
- 2014 HPC Innovation Excellence Award (team)
- 2014 ORNL Awards Night, Team Accomplishment, *Engineering Research and Development*

Professional Activities

- 2016 – 2017 Chair of Oak Ridge/Knoxville American Nuclear Society Section
- 2015 – 2016 Chair-Elect of Oak Ridge/Knoxville American Nuclear Society Section
- 2015 – 2018 Executive Committee Member of American Nuclear Society Mathematics and Computation Division
- 2015 Co-Chair of Nuclear Science Week National Big Event
- 2014 – 2015 Research Committee Oak Ridge Postdoctoral Association
- American Nuclear Society Member
- Society for Industrial and Applied Mathematics Member
- 2011 – 2012 President of Texas A&M Alpha Nu Sigma Section

Journal Publications

1. **T. M. Pandya**, S. R. Johnson, T. M. Evans, G. G. Davidson, S. P. Hamilton, A. T. Godfrey, "Implementation, Capabilities, and Benchmarking of Shift, a Massively Parallel Monte Carlo Radiation Transport Code," *J. Comp. Phys.*, **308**, 239-272, 2016.
2. S.P. Hamilton, T.M. Evans, G.G. Davidson, S.R. Johnson, **T.M. Pandya**, A.T. Godfrey, "Hot Zero Power Reactor Calculations Using the Insilico Code", *J. Comp. Phys.*, **314**, 700-711, 2016.

3. A.E. Isotalo, G.G. Davidson, **T.M. Pandya**, W.A. Wieselquist, S.R. Johnson, "Flux renormalization in constant power burnup calculations," *Annals of Nuclear Energy*, **96**, 148-157, 2016.
4. G. G. Davidson, T. M. Evans, J. J. Jarrell, S. P. Hamilton, **T.M. Pandya**, R. N. Slaybaugh, "Massively Parallel, Three-Dimensional Transport Solutions for the k -Eigenvalue Problem," *Nucl Sci. Eng.*, **177**, 111-124, 2014.
5. S. Pautz, M. Adams, **T.M. Pandya**, "Scalable Parallel Prefix Solvers for Discrete Ordinates Transport" *Nucl Sci. Eng.*, **169**, 1-17, 2009.

Conference Publications and Presentations

1. **T.M. Pandya**, T.M. Evans, S.P. Hamilton, J.A. Ellis, "A Fully Synchronous Domain Decomposed Transport Algorithm with Splitting" SIAM CSE, Feb. 27 – March 3, Atlanta, GA, 2017.
2. G.G. Davidson, **T.M. Pandya**, S.R. Johnson, T.M. Evans, W.A. Wieselequist, and A.E. Isotalo, "Nuclear Depletion Capabilities in the Shift Monte Carlo Code," PHYSOR, May 1-5, Sun Valley, ID, 2016.
3. M. Munk, R.N. Slaybaugh, **T.M. Pandya**, S.R. Johnson, T.M. Evans, "FW/CADIS-Omega: An Angle-Informed Hybrid Method for Deep Penetration Radiation Transport", PHYSOR, May 1-5, Sun Valley, ID, 2016.
4. M. Ramirez Zweiger, R.N. Slaybaugh, T.M. Evans, S.P. Hamilton, **T.M. Pandya**, "Radiation Transport Using Rayleigh Quotient Iteration with Multigrid in Energy Preconditioning," Copper Mountain Conference on Iterative Methods, March, Copper Mountain, CO, 2016.
5. **T. M. Pandya**, S. R. Johnson, G. G. Davidson, T. M. Evans, S. P. Hamilton, "Shift: A Massively Parallel Monte Carlo Radiation Transport Package," Joint International Conference on Mathematics and Computation (M&C), Supercomputing in Nuclear Applications (SNA) and the Monte Carlo (MC) Method, April 19-23, Nashville, TN, 2015.
6. T. M. Evans, **et. al.**, "Three-Dimensional Discrete Ordinates Reactor Assembly Calculations on Gpus," Joint International Conference on Mathematics and Computation (M&C), Supercomputing in Nuclear Applications (SNA) and the Monte Carlo (MC) Method, April 19-23, Nashville, TN, 2015.
7. **T.M. Pandya**, M. Adams, W.D. Hawkins, "Long Characteristics with Piecewise Linear Sources Designed for Unstructured Grids," International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2011), May 8-12, Rio de Janeiro, Brazil, 2011.
8. S. Pautz, **T.M. Pandya**, M. Adams, "Scalable Parallel Prefix Solvers for Discrete Ordinates Transport," International Conference on Advances in Mathematics, Computational Methods and Reactor Physics (M&C 2009), American Nuclear Society, May 3-7, Saratoga Springs, NY, 2009.
9. **T.M. Pandya**, M. Adams, "Method of Long Characteristics Applied in Space and Time," International Conference on Advances in Mathematics, Computational Methods, and Reactor Physics (M&C 2009), American Nuclear Society, May 3-7, Saratoga Springs, NY, 2009.

Other Publications

1. **T.M. Pandya**, *Long-Characteristics Methods with Piecewise Linear Sources in Space and Time for Transport on Unstructured Grids*, PhD Dissertation at Texas A&M University, December, College Station, TX 2012.
2. **T.M. Pandya**, *Long Characteristic Method in Space and Time for Transport Problems*, Master's Thesis at Texas A&M University, December, College Station, TX, 2009.