Nathan S. Ryan

CONTACT INFORMATION	Graduate Research Assistant University of Illinois, Urbana-Champaign Nuclear, Plasma, and Radiological Engineering	mobile: (708) 567-0002 e-mail: nsryan2@illinois.edu website: nsryan.github.io	
RESEARCH INTERESTS	Nuclear fuel cycle simulation and analysis, energy system modeling, and scientific computation.		
MS	University of Illinois Urbana-Champaign, Nuclear, Plasma, and Radiological Engineering Aug 2022 – est. May 2024		
BS	University of Illinois Urbana-Champaign, Engineering Physics	S Aug 2019 – Aug 2022	
RESEARCH EXPERIENCE	University of Illinois at Urbana-Champaign, Urbana, IL Graduate Research Assistant, Nuclear Plasma and Radiological Engineering Aug 2022 – Present Undergraduate Research Assistant May 2020 – Aug 2022 Advanced Reactors and Fuel Cycles group.		
HONORS AND	NPRE, Students Award for Excellence in Graduate Service	2023	
Awards	ANS, Student Sections Committee Commendation for Service and Lead NPRE, Students Award for Excellence in Undergraduate Service	dership 2023 2022	
	UIUC, Dean's List	2020	
	Department of Physics, Excellence in Physics Award	2020	
JOURNAL [1] PUBLICATIONS	1] A. M. Bachmann, R. Fairhurst-Agosta, Z. Richter, N. Ryan , and M. Munk. Enrichment dynamics for advanced reactor HALEU support. <i>EPJ Nuclear Sciences & Technologies</i> , 7:22, 2021. Publisher: EDP Sciences. URL: https://www.epj-n.org/articles/epjn/abs/2021/01/epjn210024/epjn210024.html, doi:10.1051/epjn/2021021		
TECHNICAL [2] REPORTS	S. G. Dotson, A. M. Bachmann, Z. M. Richter, N. R. Panczyk, N. S. Ryan , A. C. Balla, and E. R. Fanning. Economic and Carbon Impacts of Potential Illinois Nuclear Plant Closures: The Cost of Closures. Technical Report UIUC-ARFC-2021-02, University of Illinois at Urbana-Champaign, Urbana, IL, May 2021. URL: github.com/arfc/2021-04-nm-illinois		
INVITED	Memphis Rise Academy, Careers in Nuclear Panel	May 31, 2023	
Talks	U. Tennessee, Knoxville , Navigating Conversations with Advisors, Managers, and Supervisors, <i>Panel</i> .	April 14, 2023	
	ANS U. Illinois, How to Present at a Conference, <i>Invited Talk</i> . ANS U. Illinois, How to Create a Conference Abstract, <i>Invited Talk</i> .	March 13, 2023 Jan 23, 2023	
	U. Illinois, Physics and Astronomy Convocation, Student Remarks.	May 15, 2022	
	Tinley Park High School, Introduction to Nuclear Science & Career TEDxYouth, Evolutionary Anthropology and Youth in Science, <i>Invit</i>		
SCIENTIFIC COMPUTING TEACHING	Computational Resource Access Network, Vitrual Intro to Python, Numerical Methods, Parallel Programming, and Best	Feb-April, 2023 Practices	
SCIENTIFIC	Languages	bash, C++, Python	
COMPUTING SKILLS	Build Systems	make, CMake	
OMED	Databases Test Frameworks	$\begin{array}{c} \mathrm{SQL} \\ \mathrm{PyTest} \end{array}$	
	Version Control	git	
	Other Tools	Sphinx, LATEX, Mathematica	

Professional Service	Vice Chair, Student Sections Committee, ANS Chair, Student Conference Finance Subcommittee, ANS Chair, Winter Meeting Student Program, ANS Organizer, Young Professionals Congress, ANS Public Relations Officer, U. Illinois ANS student section Coordinator, Engineering Outreach Bureau, Grainger Engineering Council Media Coordinator, 2022 ANS Student Conference	2023-present 2022-2023 2022 2022-2023 2020-2022 2020-2022 2019-2022
DEPARTMENTAL SERVICE	Committee Member, Diversity, Equity, and Inclusion Committee Committee Member, Graduate Student Advisory Committee	2022–present 2022–present