

Nathan S. Ryan

CONTACT INFORMATION	Graduate Research Assistant <i>University of Illinois, Urbana-Champaign</i> <i>Nuclear, Plasma, and Radiological Engineering</i>	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.	
BS	University of Illinois Urbana-Champaign, ENGINEERING PHYSICS	Aug 2019 – Aug 2022
RESEARCH EXPERIENCE	University of Illinois at Urbana-Champaign, Urbana, IL <i>Graduate Research Assistant, Nuclear Plasma and Radiological Engineering</i> <i>Undergraduate Research Assistant</i> Advanced Reactors and Fuel Cycles group.	Aug 2022 – Present May 2020 – Aug 2022
HONORS AND AWARDS	NPRE, Students Award for Excellence in Undergraduate Service UIUC, Dean's List Department of Physics, Excellence in Physics Award	2022 2020 2020
JOURNAL 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 REPORTS	[2] 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 TALKS	U. Tennessee, Knoxville , Navigating Conversations with Advisors, Managers, and Supervisors, <i>Panel</i> . 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> . U. Illinois , Physics and Astronomy Convocation, <i>Student Remarks</i> . Tinley Park High School , Introduction to Nuclear Science & Careers, <i>Seminar</i> . TEDxYouth , Evolutionary Anthropology and Youth in Science, <i>Invited Speaker</i> .	April 14, 2023 March 13, 2023 Jan 23, 2023 May 15, 2022 Jan 17, 2020 Feb 15, 2019
SCIENTIFIC COMPUTING TEACHING	Computational Resource Access Network , Vitruvial Intro to Python, Numerical Methods, Parallel Programming, and Best Practices	Feb–April, 2023
SCIENTIFIC COMPUTING SKILLS	Languages Build Systems Databases Test Frameworks Version Control Other Tools	bash, C++, Python make, CMake SQL PyTest git Sphinx, L ^A T _E X, Mathematica
PROFESSIONAL SERVICE	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	2022–2023 2022 2022–2023 2020–2022 2020–2022

Media Coordinator, 2022 ANS Student Conference

2019–2022

DEPARTMENTAL
SERVICE

Committee Member, Diversity, Equity, and Inclusion Committee
Committee Member, Graduate Student Advisory Committee

2022–present
2022–present