

PETER G. HOTVEDT

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EDUCATION

University of Michigan

Ph.D. Student, Nuclear Engineering
· Research Advisor: Dr. Zhong He

*Ann Arbor, Michigan
Aug 2021 - Present*

University of Wisconsin - Madison

B.S. Nuclear Engineering - Radiation Sciences Track
· Additional Major in Mathematics - Applied Track
· Certificate in Physics
· Undergraduate Research Advisor: Dr. Sean Fain

*Madison, Wisconsin
Sep 2016 - Dec 2020*

Zhejiang University

Study Abroad

*Hangzhou, China
May 2018 - Jul 2018*

RESEARCH

Orion Radiation Measurement Group, University of Michigan

Graduate Student Research Assistant

- Developing imaging modalities for cadmium zinc telluride (CZT) semiconductor radiation detectors.

*Ann Arbor, Michigan
Aug 2021 - Present*

Fain Group and Center for Accelerated Medical Imaging

Undergraduate Research Assistant

- Investigated various topological metrics from MRI and CT images, related to the lung on a whole-lung, lobar, and sub-lobar level.
- Developed and maintained group MATLAB code for image segmentation and analysis.

*Madison, Wisconsin
Sep 2018 - Jul 2021*

INVOLVEMENT AND LEADERSHIP

Professional Involvement

American Nuclear Society (ANS)

- Vice Chair, Student Sections Committee (SSC)
- Liaison for Isotopes and Radiation Division (IRD) - SSC / Young Member Group (YMG)
- Vice Chair, Public Policy Subcommittee - SSC
- SSC Member

May 2022 - Jun 2023

June 2021 - Present

June 2020 - Present

June 2020 - Present

American Nuclear Society - University of Michigan Student Section

- Member

Aug 2021 - Present

Nuclear Engineering Student Delegation

- Co-Vice Chair, 2021 Delegation
- Member, 2020 Delegation

Dec 2020 - Oct 2021

Jun 2020 - Nov 2020

American Nuclear Society - U.W. Madison Student Section

- President
- Governor A - Local Section Outreach Coordinator

May 2019 - May 2020
January 2019 - May 2019

Academic and Departmental Involvement

Nuclear Engineering / Engineering Physics Student Advisory Committee

- Undergraduate Chair

Apr 2019 - Dec 2020

Dead Mathematician's Society - U.W. Math Club

- President
- Vice President

May 2019 - May 2020

May 2018 - May 2019

Other Involvement

PersonaCon

- Admin and Emcee, 2022 Virtual Convention
- Admin and Emcee, 2021 Virtual Convention

Jan 2022 - Jul 2022

Jan 2021 - Jul 2021

CONFERENCE PUBLICATIONS

Local fSAD Features Derived from CT Topological Parametric Response Maps Are Associated with Ventilation Defects on Hyperpolarized Gas MRI in Asthma
American Thoracic Society 2019 International Conference

Dallas, TX
May 2019

D. Mummy, B.A. Hoff, **P. Hotvedt**, C. Hatt, K.J. Carey, A. Fortuna, W. Zha, M. Schiebler, R. L. Sorkness, L.C. Denlinger, N.N. Jarjour, C.J. Galban, S.B. Fain

POSTERS

Validation of Quantitative Air-Trapping on CT using Ventilation Imaging on Hyperpolarized Gas MRI
2019 American Nuclear Society Winter Meeting

Washington, DC
Nov 2019

P. Hotvedt, K.J. Carey, C. Hatt, C.J. Galbán, S.B. Fain

HONORS & AWARDS

2022 **Alpha Nu Sigma**

WORK EXPERIENCE

United States Census Bureau

2020 Census Post-Enumeration Surveyor

Madison, Wisconsin
Jun 2021 - Sep 2021

- Door-to-door enumerator for the state of Wisconsin, involved interpersonal interaction and regular travel.
- Conducted interviews by reading and communicating with government processes in both English and Spanish as needed.

UW Carbone Cancer Center

Student Intern

Madison, Wisconsin
Oct 2017 - Dec 2020

- In-office student assistant for the internal auditing group for medical clinical trials.

- Updated internal knowledge base through learned knowledge of HTML, and medical reports were categorized and logged accordingly.

United States Census Bureau
2020 Census Enumerator

Minneapolis, Minnesota
Aug 2020 - Oct 2020

- Door-to-door enumerator for the greater Minneapolis area, focusing on North Minneapolis suburbs
- Enumerated population by reading and communicating with government technology in both English and Spanish as needed.

PROFESSIONAL ORGANIZATION MEMBERSHIP

Since 2021	Graduate Student Member	Institute of Electrical and Electronics Engineers
Since 2017	Student Member	American Nuclear Society

RELEVANT TECHNICAL AND PROFESSIONAL SKILLS

Software & Tools	MATLAB, C++, MCNP6.2, R Studio, L ^A T _E X, HTML
Live Media Production	Planning and enacting of long-form live productions with OBS
Language & Communication	Fluent in English, communicative in Spanish, proficient in French