

PETER G. HOTVEDT

Madison, WI

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EDUCATION

University of Wisconsin - Madison

Madison, WI

B.S. Nuclear Engineering

September 2016 - Expected December 2020

- Radiation Sciences Track
- Cumulative GPA: X.XX / 4.00

B.M.A.J. Mathematics

September 2017 - Expected December 2020

- Applied Track

Certificate in Physics

September 2018 - Expected December 2020

Zhejiang University

Hangzhou, China

Study Abroad

May 2018 - July 2018

PROJECTS AND RESEARCH

Topological Analysis of Ventilation Defect Percentage in Lungs

September 2018 - Present

Undergraduate Research Project

- Investigated various metrics from MRI and CT images, related to the lung on a whole-lung, lobar, and sub-lobar level.
- Medical image analysis (segmentation, filtering) used to directly locate defects in the two different imaging systems.
- Segmentation done with MATLAB, and statistical analysis done in RStudio.

Molybdenum-99 Producing Reactor Design

January 2020 - May 2020

Senior Design Project

- Designed a subcritical Uranium-235 target based reactor to produce enough 6-day Curies of Molybdenum-99 for the UW Hospital System.
- Design was created primarily with MCNP6.2 and MATLAB.

LEADERSHIP

American Nuclear Society

Student Sections Committee Member

June 2020 - Present

Nuclear Engineering Student Delegation

2020 Delegation Member

June 2020 - Present

NEEP Student Advisory Committee

Undergraduate Chair

April 2019 - Present

American Nuclear Society - U.W. Madison Student Section

Chapter President

May 2019 - May 2020

Governor A

January 2019 - May 2019

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

President

May 2019 - May 2020

Vice President

May 2018 - May 2019

PRESENTATIONS

2019 American Nuclear Society Winter Meeting

Washington, DC

Validation of Quantitative Air-Trapping on CT using Ventilation Imaging
on Hyperpolarized Gas MRI

November 2019

WORK EXPERIENCE

Proceum PVT. Ltd.

Hyderabad, India

Medical Voiceover Artist

September 2020 - Present

- Professional voiceover artist for a technical eLearning project based out of Hyderabad.
- Medical scripts covering many medical school topics were read in home recording booth, edited, and sent back to be synced up to videos for the company's YouTube channel.

UW Carbone Cancer Center

Madison, WI

Student Intern

October 2017 - Present

- In-office student assistant for the internal auditing group.
- Internal knowledge base was updated through learned knowledge of HTML, and medical reports were categorized and logged accordingly.

PROFESSIONAL ORGANIZATION MEMBERSHIP

2017 - Present **Student Member** American Nuclear Society