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Summary

Graduating Physics major with experience in academic research. Minors in Natural Resources and Environmental Science, and Mathematics. Familiarity with Microsoft Office, CAD software, MATLAB, Python and R, and data analysis. Continuing portrayal of high academic achievement.

Education

Purdue University (Expected Graduation: May 2023)

- Bachelor of Science in Physics Honors
- Minors: Natural Resources and Environmental Science, Mathematics
- GPA: 3.95/4.0 (Semester Honors and Dean's List all semesters)

Employment

Purdue Undergraduate Research Assistant (Summer 2022)

Conducted geophysics research with professor. Used specialized MATLAB programs to produce samples with stratified percolation patterns along various fracture geometries. Modified sample preparation methods to reduce variability. Designed, modified, and produced 3D printed sample frames to improve precision and repeatability. Analyzed 3D scanned data with 3D visualization and analysis software and analyzed CSV data from 2D imaging during sample testing.

Experience

Undergraduate Academic Research (2022-2023)

Continuation of summer 2022 research work, with a focus on refining modified experimental methods and sample frame designs. Included a formal research paper.

Physics Data Mine Learning Community (2019-2020)

Participated in group research aimed toward reconstructing the paths of muons as they travel through the XENON dark matter detector. Analyzed data by working with both Python and R. Gave a poster presentation at an undergraduate research expo.

Advanced Placement Capstone (2017-2019)

Included year-long research project and formal presentation on effectiveness of EPA policies in protecting both public health and the environment from impacts of particulate matter emissions.

Skills

- MATLAB
- Microsoft Office
- 3D printing
- CAD software: Onshape, Autodesk Inventor
- 2D and 3D imaging with X-ray machine
- Dragonfly ORS

Involvement / Interests

- Independent research in environmental issues and sustainability
- Member of the Purdue Chapter of the Alpha Lambda Delta Phi Eta Sigma honor society
- Member of Purdue Orchestras
- National Honor Society

Awards and Acknowledgements

- Semester Honors and Dean's List for each completed semester at Purdue.
- Top Scholar Award for high level of academic achievement in high school.