

Riley E. Roach

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PERSONAL STATEMENT

Graduate student in Energy Transition with experience in solar asset management, offshore wind grid integration, and clean energy. Skilled in data analysis, forecasting, and technical communication. Seeking opportunities to accelerate decarbonization through innovative, scalable solutions.

EXPERIENCE

Technical Asset Management Intern, CLEANCAPITAL

MAY 2025 - AUGUST 2025

- Organized and standardized performance data across 89 solar assets
- Supported asset optimization via coordination of engineering, operations, and external stakeholders
- Delivered research-based recommendations on solar panel recycling options and lifecycle impacts

Resilient Carbon-Free U.S. Electric Power Systems Researcher, NATIONAL SCIENCE FOUNDATION

MAY 2024 - JULY 2024

- Conducted research on offshore wind turbine integration into the New York power grid
- Built MATLAB-based predictive models to evaluate uncertainty reserves for offshore wind integration
- Presented findings to the New York Independent System Operator (NYISO).

Algae Biofuel Research I-Corps, NATIONAL SCIENCE FOUNDATION

OCTOBER 2024 - NOVEMBER 2024

- Interviewed 20+ individuals to identify the feasibility on algae as a biofuel.
- Analyzed economic, environmental, and technical aspects of biofuel integration.
- Developed and presented findings on alternative fuel solutions.

EDUCATION AND SCHOLASTICS

DARTMOUTH COLLEGE

Master of Energy Transition from the Arthur L. Institute for Energy and Society

SEPTEMBER 2025 - PRESENT

- Current courses include Technology of Current & Future Energy Systems, Climate Science & Energy Transition, Data Analytics for Energy & Climate, Energy & Law Policy, Energy Markets & Economics
- Currently serving on the Board of the Thayer School of Engineering Energy Club

APPALACHIAN STATE UNIVERSITY

Bachelor of Science (GPA 3.8)

AUGUST 2021 - MAY 2025

- Major: Sustainable Technology
- Minor: Community & Regional Planning
- Minor: Entrepreneurial studies
- Athletics: Division I Woman's Cross Country and Track:
- 25 hrs/ week
- Student-Athlete Advisory Committee (SAAC) Representative (2023 - 2025)

SKILLS

- **Professional Skills:** Leadership, Communication, Project Management, Public Speaking
- **Analytical:** Data Analysis, Energy Forecasting, GIS Mapping
- **Technical:** MatLab, Excel, ArcGIS, AutoCAD

CERTIFICATIONS AND PUBLICATIONS

- Co-author. *"Uncertainty Reserve Design of the NY Power Grid with High Offshore Wind Resources."* Presented at the North American Power Symposium (NAPS2025)
- 30-Hour OSHA Training, Issued April 2024
- Introduction to Programming Using Python, University of Michigan, Issued Dec 2025