

Addison Peed

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EDUCATION

B.S., Materials Science and Engineering, Virginia Tech, Blacksburg, VA
Cumulative GPA: **3.68/4.0**

Expected May 2028

SELECTED WORK & RESEARCH EXPERIENCE

Research Assistant: VT Computational Organic Geochemistry and Astrobiology Lab
Blacksburg, Virginia

January 2025 - Present

- Collecting and analyzing total organic carbon from Mars-analog hypersaline environments, contributing to the NASA TATOOINE: Testing Arid Transformation Of Organics via IN situ Extraction project in order to assess preservation potential of organics by utilizing a carbon elemental analyzer.
- Consulting with NASA Goddard research scientist, Dr. Gabriella Weiss, to develop steps for implementing machine learning into isotope research in order to better understand reaction pathways of organic molecules.
- Addressed the challenge of predicting carbon abundance in Mars-analog environments by developing a Python-based regression model; applied statistical analysis and coding techniques to generate predictions, enhancing data-driven insights in planetary science research.

Materials Lead and Co-Founder: NOMAD: Nodule Ocean Mining and Design
Blacksburg, Virginia

October 2025 - Present

- Developing sustainable technologies for extracting polymetallic nodules from the ocean floor with the intention of providing interdisciplinary experience in marine engineering, promote environmental responsibility, and advance innovation in ocean resource utilization.
- Selecting, testing, and evaluating materials used in prototypes and subassemblies to ensure strength, durability, and environmental compatibility.

Materials and Design Specialist: IDPro Design Team, Automatic Hydroponic Nutrient Delivery Aug. 2025 - Dec. 2025
Blacksburg, Virginia

- Designed a self-sufficient hydroponic growth system with the long-term goal of combining machine learning and thermal camera sensors, aimed at creating an autonomous platform for resource-efficient food production in constrained environments.

Assistant Lab Personnel: Environmental Tracking Lab
Blacksburg, Virginia

January 2025 - July 2025

- Outlined an experiment with the goal of analyzing charcoal pieces in bat guano samples to predict Virginia's landscape 30,000 years ago and the frequency of natural forest fires.

OTHER ORGANIZATIONS

Outdoor Club VT
Materials Engineering Professional Society
VT Paleobiology & Geobiology Lab

August 2025 - Present
July 2025 - Present
January 2025 - May 2025

TECHNICAL SKILLS

Adobe Creative Suite, Intermediate Fusion, Intermediate Blender
Novice Java, Novice Python
Microsoft Office Suite, Laboratory & Instrumentation Techniques

SOFT SKILLS

Project Management
Detail-oriented
Conflict Resolution