Maya Hall

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EDUCATION

M.S. Environmental Science, American University *August 30, 2021–May 13, 2023*
Thesis: *Investigating the Variability of Urban Tree Phenology Using Volunteer-Hosted Phenocams*
GPA: 3.96

B.S. Wildlife Ecology and Conservation, University of Delaware *August 28, 2014–May 26, 2018*
GPA: 3.42

SKILLS AND CERTIFICATIONS

Skills

- *Software/Programs:* ArcGIS Pro, ENVI, Google Suite, Google Earth Engine, Microsoft Office Suite, R, Python
- *Laboratory and Field:* wildlife and vegetation identification, statistical analysis, data management, data sampling and field surveying
- *Other:* scientific communication, technical report writing, oral presentations, grant writing, survey creation and distribution, customer service, partner relationship management, stakeholder engagement, community event planning, program management

Certifications

- Software Carpentry Instructor Certification (The Carpentries) — August 2025
- GIS for Climate Action Certification (Esri MOOC) — March 2025
- Spatial Data Science Certification (Esri MOOC) — October 2024
- Inclusive STEM Teaching Certification (Boston University) — November 2022

WORK AND RESEARCH EXPERIENCE

NASA WERK Research Assistant *December 2025–Present*
Bay Area Environmental Research Institute, NASA Ames Research Center

- Supporting the Individual Tree Monitoring (ITM) product as part of the Wildfire, Ecosystem Resilience, and Risk Initiative (WERK)
- Using NAIP imagery to create training labels for living and dead trees across the state of California

Data Analyst *September 2025–November 2025*
Analytical Mechanics Associates, Remote

- Using LLMs and Deep Research workflows to investigate patterns, trends, and novel insights from publicly available environmental, economic, and social data
- Leveraging multiple AI models and data analysis techniques to produce executive-level reports
- Iterating and documenting procedures for future project adoption

NASA DEVELOP Impact Analysis Fellow *September 2023–September 2025*
Analytical Mechanics Associates, NASA Ames Research Center

- *Data Analysis and Research*
    - Collecting programmatic data for quantitative and qualitative analysis to measure program success
    - Mapping program impact using ArcGIS Pro and producing data visualizations of program impact, participant skill growth, and partner capacity-building using R

    - Conducting statistical analyses and improving data tracking systems, as well as refining program-wide processes for increased efficacy
- *Project Management*
    - Leading the first DEVELOP project based in Hilo, Hawai'i and remotely supervising a team of four researchers
    - Providing scientific, administrative, and professional support to 63+ teams
    - Advising on robust scientific methodologies and providing technical edits to 10+ projects
- *Program Facilitation*
    - Assisting with Software Carpentry trainings (Google Earth Engine (GEE), Python, R, Git, and Unix)
    - Planning and hosting professional development workshops and panels
    - Supporting research projects across NASA's thematic application areas and hiring activities three times per year
- *Collaboration Support*
    - Enhancing and maintaining relationships between program alumni, project science advisors, and project partners
    - Establishing an alumni mentorship initiative that serves to better connect existing program participants with alumni
    - Engaging potential project partners and supporting new ideation, as well as relationship-building

NASA DEVELOP Project Lead *June 2023–August 2023*

Science Systems and Applications, Inc., Ames Research Center

- Used Google Earth Engine (GEE), ArcGIS Pro, Landsat 8 OLI, Landsat 9 OLI-2, and Sentinel-2 to examine eelgrass declines in southern Oregon
- Conducted an in-depth literature review and explored the feasibility of using Random Forest, Support Vector Machine, and Maximum Likelihood modeling to identify eelgrass under cloudy conditions
- Collaborated with research and Tribal partners to determine project end goals and produce end products that serve the partners' communities
- Successfully supported a team of three early career researchers and ensured that each member not only contributed to the project, but felt ownership of the research

Graduate Research and Teaching Assistant *August 2021–May 2023*

Department of Environmental Science, American University

- Researched the variability of phenology of urban trees in Washington, D.C. as captured by digital time-lapse cameras (phenocams)
- Conducted an independent literature review and proposal defense of novel research
- Used R and ArcGIS Pro to perform statistical methods like hierarchical mixed-effects modeling to investigate relationships between variables
- Provided lectures on topics ranging from pollution to biodiversity at the undergraduate-level

Environmental Educator *March 2021–September 2022*

The Alice Ferguson Foundation

- Taught over 300 3rd-12th grade students in DC and MD
- Participated in teacher institute trainings and coordinated the education program
- Supported grant writing for the organization

Community Engagement Coordinator *December 2019 –March 2021*

Rock Creek Conservancy

- Implemented invasive species removal and pollution mitigation efforts across Washington, D.C.

- Led field-based restoration and volunteer events at over eight sites within Rock Creek National Park
- Revitalized data tracking and management systems through Excel and Salesforce software

Smithsonian Intern *June–November 2019*

ForestGEO, Smithsonian Environmental Research Center (SERC)

- Used vegetation measurement tools (calipers, D tape, and more) to collect forest census data
- Measured and gathered data on every woody stem over 1 cm within the 16 hectare plot with a team of six
- Produced novel research on bird presence and habitat type within the research forest plot

Environmental Educator *March–May 2019*

Pickering Creek Audubon Center, National Audubon Society

- Created lesson plans and led students through the topics of ecology, environmental science, and conservation
- Taught 3rd grade through high school as a field and classroom educator
- Regularly collaborated with the education team to make meaningful lesson-plan and field-course decisions

Invertebrate Ecology Intern *May–August 2017*

C&O Canal National and Historical Park, National Park Service

- Created and conducted field procedures for insect identification and collection
- Led vegetation sampling throughout several regions of the C&O Canal National and Historic Park
- Increased my navigation and data management skills
- Prepared independently-collected spider samples to be analyzed for carbon and nitrogen levels

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CONFERENCES AND PRESENTATIONS

Attendee, Science Day (Sacramento, CA) — September 2025
Presenter, The American Geophysical Union (AGU) Annual Meeting (Washington, D.C.) — December 2024
Attendee, Society of Asian Scientists and Engineers (SASE) National Convention (Boston, MA) — October 2024
Presenter, NASA DEVELOP Closeout (Mountain View, CA) — August 2023
Presenter, The American Association of Geographers (AAG) Annual Meeting (Denver, CO) — March 2023
Presenter, Trees in the City Symposium (Virtual) — September 2022
Attendee, Smithsonian Women in Environmental Leadership Summit (Washington, D.C.) — September 2019

ADDITIONAL INFORMATION

Relevant Involvement

Instructor, Geospatial R Coding Workshop (Virtual) — October 2025
Panelist, NASA ROSES A.42 Disasters Solicitation Inclusion Plan Review (Virtual) — September 2024
Mentee/Participant, Clean Water Coalition Young Professionals of Color (Virtual) — February 2021–April 2022

Relevant Courses

General Ecology, Conservation: Natural Resources, Wildlife Conservation Biology, GIS: Natural Resources, Wildlife Research Techniques, General Statistics, Wildlife Management, Wildlife Policy and Administration, Wildlife Habitat Management, Plants and Human Culture, Statistical Methods in R, Introduction to GIS, Environmental Remote Sensing, Environmental GIS, Data Visualization