Andy Atallah

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https://www.linkedin.com/in/andy-atallah/ - https://andya17.github.io/ (Portfolio)

EDUCATION

University of Massachusetts Amherst – Amherst, MA
Master of Science in Geographic Information Science and Technology   September 2025
- **GPA**: 4.00/4.00
- **Sample Course Work**: Python for ArcGIS, Spatial Databases and Data Interoperability, Remote Sensing and Image Interpretation, GIS and Spatial Analysis, WebGIS, Geograph. Theory and Analysis

Middlebury College – Middlebury, VT
Bachelor of Arts in Environmental Studies and Biology   May 2024
- **GPA**: 3.97/4.00
- **Honors/Awards**: Phi Beta Kappa; summa cum laude; Eagle Scout (awarded 2019)
- **Sample Course Work**: Cartography, Conservation Planning, Biostatistics, Statistical Learning

EXPERIENCE

Massachusetts Geological Survey – Amherst, MA   May 2025 – August 2025
Geospatial Summer Intern
- Performed spatial analysis and created maps to reveal environmental characteristics of 50+ state forests using ArcGIS Pro and Python, prioritizing sampling locations for a multi-agency project.
- Expanded a previous project by creating a public-facing web application showing an estimated carbon sequestration rate in 40,000 tax parcels containing salt marsh from New York to Maine.
- Digitized over 2,000 salt marsh pools based on seven aerial imagery mosaics to generate training data for a neural network developed by a UMass postdoctoral researcher.

University of Massachusetts Amherst – Amherst, MA   January 2025 – May 2025
Graduate Research Assistant
- Calculated the localized carbon sequestration rate in thousands of Massachusetts tax parcels containing salt marsh area through spatial analysis of raster and vector data in ArcGIS Pro.
- Shared project to ArcGIS Online and configured a public-facing web application reviewed by state personnel; app to be made available to the public to inform landowners of their parcels' services.

Charles River Watershed Association – Boston, MA   June 2024 – August 2024
GIS Restoration Intern
- Created and edited public and internal maps and layers concerning invasive species, dams, and climate change for River Restoration Program using ArcGIS Pro and ArcGIS Online.
- Conducted invasive species surveying and composed SOP for loading data into ArcGIS Pro.
- Researched invasive plant species identification and management for 45+ species and completed draft of a 60+ page instructional booklet to share among partner organizations.

Breakthrough Strategies and Solutions – Remote   March 2023 – August 2023
Ecological Restoration Intern
- Composed professional summaries of 19 case studies of successful ecological restoration across a variety of ecosystems after conducting extensive literature searches of hundreds of academic papers.
- Configured an ArcGIS StoryMap with an embedded map to visually represent case studies.

SKILLS AND ACTIVITIES

- **GIS Software:** Experience with ArcGIS Pro, ArcGIS Online, ArcGIS Survey123, ArcGIS ModelBuilder, ArcGIS Field Maps, FME, Google Earth Engine, Python, QGIS, R, and PostGIS (SQL). Experience with ETL workflows, data cleaning and analysis, managing coordinate systems, composing documentation, and cartographic principles (including editing maps in Adobe Illustrator).
- **Programming Languages**: Experience with Python, R, SQL, HTML/CSS, & JavaScript.
- **Other Software:** Experience with Google Suite and Microsoft Office.
- **Student Organizations**: Soil and Water Conservation Society (President; UMass Amherst Chapter).