# 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
*Candidate for a 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
*Recipient of a Bachelor of Arts in Environmental Studies; Biology*     May 2024
- **GPA**: 3.97/4.00
- **Honors/Awards**: Phi Beta Kappa; summa cum laude; Eagle Scout (awarded 2019)
- **Sample Course Work**: Cartography, Open GIScience, Conservation Planning, Statistical Learning

## EXPERIENCE

**Massachusetts Geological Survey** – Amherst, MA     May 2025 – Present
*Geospatial Summer Intern*
- Investigate methods to build an algorithm to recognize marsh degradation in historical satellite imagery using Python image processing libraries within ArcGIS Pro.
- Conduct spatial analysis and create maps to reveal environmental characteristics of 100+ state forests using ArcGIS Pro and Python to prioritize sampling locations for a multi-agency project.
- Validate and generate training data for an automated workflow created by a UMass postdoc by hand-digitizing thousands of marsh pool features based on seven MassGIS imagery mosaics.

**University of Massachusetts Amherst** – Amherst, MA     January 2025 – May 2025
*Graduate Research Assistant*
- Determined the localized carbon sequestration rate in thousands of Massachusetts tax parcels containing salt marshes using 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 shared with the public to inform landowners of their parcels' services.

**Charles River Watershed Association** – Boston, MA     Summer 2024
*Watershed Restoration Intern – Summer 2024*
- 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 sources on 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, 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).