

James Edward Rigney

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EDUCATION

Master of Science in Geographic Information Science 2023-2024

University of Massachusetts Amherst / 3.9 GPA

Bachelor of Science in Forest Ecology & Conservation 2019-2023

University of Massachusetts Amherst / 3.8 GPA

SKILLS

Python | R | ArcGIS Pro | ESRI Suite | HTML | CSS | JavaScript | QGIS | SQL | PostGIS

GIS & DATA ANALYSIS EXPERIENCE

UMass Amherst Physical Plant | Amherst, MA January – May 2024

GIS Technician

- Digitized landscape management routes using ArcGIS Pro
- Automated complex geospatial analysis workflows using Python, reducing project time
- Produced high-quality maps for optimized staff route planning and resource allocation

Spatial Databases & Data Interoperability | Amherst, MA September – December 2023

Student

- Leveraged FME Workflow to transform CAD data into File Geodatabases
- Executed hundreds of SQL Queries in Postgres Admin, optimizing database performance

Massachusetts DCR | Amherst, MA December 2022 – January 2023

GIS Technician

- Georeferenced over 80 map PDFs in ArcGIS Pro, ensuring accuracy
- Analyzed tax parcel information to assist in determining plot locations
- Refined attribute tables following provided schema using given and calculated data

UMass Amherst Department of Geographic Sciences | Amherst, MA February – December 2022

Introduction to GIS Teaching Assistant

- Guided students in mastering ArcGIS Pro through labs, enhancing foundational GIS skills
- Demonstrated advanced ArcGIS analysis tools, equipping students with industry-relevant skills

Massachusetts DCR | Amherst, MA May – August 2022

Management Forestry Seasonal Technician

- Executed over 50 Continuous Forest Inventory (CFI) plots, collecting forest measurements.
- Cross-referenced ground data with GIS-derived measurements to validate spatial accuracy
- Coordinated with district managers, facilitating clear communication across teams

LEADERSHIP AND COMMUNICATION EXPERIENCE

UMass Amherst Department of Geographic Sciences | Amherst, MA January 2024 – May 2024

Introduction to Human Geography Teaching Assistant

- Led four weekly discussion sections with 25 students each, fostering engagement
- Created lesson plans and activities aligned with lectures, enhancing student comprehension.

WMUA | Amherst, MA June 2022 – May 2023

Production Director

- Directed weekly meetings, coordinating a 10-person team to produce radio Public Service Announcements (PSAs).