

# Lucas Johnson, Ph.D.

✉ +1 315-345-4713 • ✉ lucas.k.johnson03@gmail.com  
🌐 lucaskjohnson.com • 💬 lucaskjohnson • 📱 lucas-johnson

## Work Experience

- Postdoctoral Scholar** Riverdale, UT  
*Oregon State University* August 2024 - Present
- Developed a shiny-live web map to support the joint consideration of carbon benefits and albedo offsets in tree-planting projects across the conterminous United States
  - Decomposing Nepal-wide forest carbon trends with NASA GEDI data to distribute REDD+ payments
- Research Assistant** Syracuse, NY  
*Climate and Applied Forest Research Institute* August 2019 - August 2024
- Developed a forest carbon mapping framework for the NYS DEC supporting net-zero emissions goals
  - Communicated research findings in 4 scientific manuscripts and 8 conference presentations
  - Contributed writing, code, and statistical/spatial analysis to technical reports for external collaborators
  - Implemented R workflows to process > 30 TB of LiDAR point clouds and 2 TB of Landsat imagery
  - Established cloud computing infrastructure (AWS), geospatial databases, and data sharing software
  - Provided mentorship and technical support to grad students
- Data Engineer** Boston, MA  
*Lightkeeper, LLC* August 2017 - July 2019
- Refactored ETL pipeline, establishing best practices and standard tools for customer-specific scripts
  - Designed and developed internal tools to track feature usage and identify computational bottlenecks
  - Implemented slack integrations to streamline requests from client support team

## Education

- Doctor of Philosophy in Environmental Science** Syracuse, NY  
*SUNY College of Environmental Science and Forestry* August 2019 - May 2024
- Bachelor of Science in Computer Science** Medford, MA  
*Tufts University* August 2013 - May 2017

## Volunteer Positions

- Technical Lead: Courtbot project** Remote  
*Code for Burlington* July 2020 - July 2021
- Workshop Assistant** Syracuse, NY  
*Foundations of Scientific Computing* December 2022, 2023

## Skills

- Programming:** R, Python, SQL, git, AWS, and Linux shell languages.  
**GIS:** QGIS, ArcGIS, GDAL/OGR, PostGIS, Google Earth Engine, and the R spatial ecosystem.