

# Elliot Shannon

## Curriculum Vitae

Department of Forestry  
Department of Statistics and Probability  
Michigan State University  
East Lansing, Michigan 48824  
✉ 360-608-3645  
✉ [shann125@msu.edu](mailto:shann125@msu.edu)



### Education

- 2021 – 2026 **Dual PhD, Forestry and Statistics & Probability**, Michigan State University
- 2017 – 2020 **BS, Biology**, George Fox University

### PhD Thesis

Title *Bayesian spatio-temporal models for national forest inventory monitoring.*  
Advisor Dr. Andrew O. Finley

### Research Interests

Spatio-temporal statistics, Multivariate statistics, Bayesian statistics, Small Area Estimation, Forest Inventory, Carbon Monitoring

### Publications

7. **Elliot S. Shannon**, Andrew O. Finley, Paul B. May, and Jane Foster. 2025. Balancing land use tradeoffs for energy development and forest resource availability using remote sensing in the Northeast United States. *In prep.*
6. **Elliot S. Shannon**, Andrew O. Finley, Paul B. May, and Sudipto Banerjee. 2025. A multivariate spatio-temporal model for forest carbon pools across the contiguous US. *In prep.*
5. **Elliot S. Shannon**, Andrew O. Finley, Paul B. May, and Sudipto Banerjee. 2025. Investigating spatio-temporal models for forest inventory data under increasing information. *In prep.*
4. **Elliot S. Shannon**, Andrew O. Finley, Paul B. May, Grant M. Domke, Hans-Erik Andersen, George C. Gaines III, Arne Nothdurft and Sudipto Banerjee. 2025. Leveraging national forest inventory data to estimate forest carbon density status and trends for small areas. *Submitted to Forest Ecology and Management.*

3. **Elliot S. Shannon**, Andrew O. Finley, Grant M. Domke, Paul B. May, Hans-Erik Andersen, George C. Gaines III and Sudipto Banerjee. 2025. Toward spatio-temporal models to support national-scale forest carbon monitoring and reporting. *Environmental Research Letters*. DOI: <https://doi.org/10.1088/1748-9326/ad9e07>.
2. Naresh Khanal, Raju Pokharel, Jagdish Poudel, Shivan Gc, **Elliot S. Shannon** and Andrew O. Finley. 2024. Analysis of location, feedstock availability, and economic impacts of potential mass timber processing facilities in Michigan. *Forest Policy and Economics*. DOI: <https://doi.org/10.1016/j.forepol.2024.103203>.
1. **Elliot S. Shannon**, Andrew O. Finley, Daniel J. Hayes, Sylvia N. Noralez, Aaron R. Weiskittel, Bruce D. Cook and Chad Babcock. 2024. Quantifying and correcting geolocation error in spaceborne LiDAR forest canopy observations using high spatial accuracy data: A Bayesian model approach. *Environmetrics*. DOI: <https://doi.org/10.1002/env.2840>.

---

## Teaching Experience