

DRYVER Z. FINCH
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Department of Geography and Sustainability
University of Tennessee, Knoxville
Knoxville, TN 37996

Geographer specializing in remote sensing applications for land and resource monitoring, conservation, and ecological disease surveillance. My work integrates both satellite- and UAV-based multispectral imaging with machine learning techniques to support sustainable management of natural resources and hydrological systems. Passionate about developing Python tools to automate workflows and promote accessibility to advanced analytical tools.

EDUCATION

2026 (expected) Master of Science, Geography
University of Tennessee, Knoxville
Topic: Satellite Anthrax Surveillance in Texas, USA
Advisor: Dr. Hannah Herrero

2024 Bachelor of Science
Geographic Information Science and Technology
University of Tennessee, Knoxville
Magna cum laude

PROFESSIONAL AND TEACHING EXPERIENCE

2024 – Present Graduate Teaching Assistant
University of Tennessee, Knoxville
Department of Geography and Sustainability
GEOG 413: Remote Sensing of the Environment
Overhauled lab curriculum to reflect industry standards;
Introduced over 40 students to fundamentals of remote sensing
GEOG 314: Intro to Uncrewed Aerial Systems
Prepared students for the FAA Part 107 Knowledge Exam; Introduced students to professional/academic UAS applications

2024 – 2025 GIS Labs Assistant
University of Tennessee, Knoxville
Department of Geography and Sustainability
Assisted Lab Manager with upkeep of over 60 department lab computers' hardware and software;
Conducted field missions with department UAS technology in support of various research projects.

2024 (Aug.-Dec.)	<p>Education Collaboration at ORNL (ECO) Intern Geospatial Science and Human Security Division Mentor: Dr. Matt McCarthy</p> <p>Supported ongoing narcotics smuggling interdiction research with United States Coast Guard and Department of Homeland Security</p>
2024 (May-Aug.)	<p>Science Undergraduate Laboratory Intern (SULI) Geospatial Science and Human Security Division Mentor: Dr. Matt McCarthy</p> <p>Developed vessel-detection methods using deep learning techniques</p>
2023 – 2024	<p>Legal/Executive Assistant Stephens & DiRado, LLP Knoxville, TN</p> <p>Served as main point of contact for the firm; prepared motions, orders, and briefs to be filed in criminal court</p>
2022-2023	<p>Environmental Compliance Intern Knoxville Utilities Board Department of Safety and Technical Services</p> <p>Created site maps for wastewater treatment facilities for annual compliance reports and developed a records-management system</p>
2021-2022	<p>Water Systems Engineering Intern Knoxville Utilities Board Department of Water Systems Engineering</p> <p>Digitized and catalogued all new and repaired assets in ArcGIS Enterprise system; Created project maps for engineers in the department</p>

AWARDS AND HONORS

2025	Bruce Ralston Geospatial Achievement Award
2025	TN View Fellowship Recipient
2024	University of Tennessee GIS&T Student of Distinction

CONFERENCE PRESENTATIONS

- 2026
(Upcoming) American Association of Geographers
Symposium on Spatial AI and Data Science: Frontiers and Applications: Big Data Computing for Geospatial Applications
Title: *Mapping High Resolution Anthrax Ecologies: Integrating PlanetScope Data and High-Performance Computing for Ecological Niche Models*
- 2025 (Sept.) TN View Annual Webinar
Title: *Hog-Spot Analysis: Monitoring the Fiends of the Smokies*
- 2025 (April) American Society of Photogrammetry and Remote Sensing, Mid-South
Oak Ridge National Laboratory
Title: *High-Resolution Land Cover and Phenological Analysis of Anthrax Outbreak Landscapes in the Texas Anthrax Triangle Leveraging Cloud-Based High-Performance Computing*
- 2025 (March) American Association of Geographers
Disease Ecologies Session
Detroit, MI
Title: *Landscape or Founder Effect: Examining differences in land cover characteristics associated with two distinct lineages of Bacillus anthracis in the Texas Anthrax Triangle*
- 2025 (Jan.) UTK Geo-Symposium
University of Tennessee, Knoxville
Title: *Narrowly Avoided the Past: Remembering Nathan Bedford Forrest at Parker's Crossroads Battlefield*

FIELD EXPERIENCE

- 2025 UAS Imaging of Cataloochee Valley
Great Smoky Mountains National Park
In support of NSF Grant #2501466
P.I.: Dr. Anna Marshall, UTK
- 2025 Archeological Aerial Data Collection
Heathsville, VA
In support of UTK Dept. of Anthropology

GUEST LECTURES

2025	Geography 513: Advanced Remote Sensing
2025	Geography 111: Our Digital Earth
2025	Geography 331: Natural Hazards
2024	Geography 413: Remote Sensing of the Environment

MEMBERSHIPS

American Society of Photogrammetry and Remote Sensing
American Association of Geographers
Southeastern Division of the American Association of Geographers UTK
UTK DARC Lab, *Managing Member*
GeogGrads, *Department Events Committee Graduate Representative*