**Theodore Kerr**

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**EDUCATION**

University of Maryland, College Park, MD Graduated May 2022

* GPA: 3.86
* Bachelor of Science in Environmental Science and Policy, Land Use concentration

**WORK EXPERIENCE**

**Global Land Analysis and Discovery (GLAD) laboratory, University of Maryland**

­­­– *Faculty Assistant* **November 2022-present**

GLAD investigates methods, causes and impacts of global land surface change using Earth observation imagery. Land cover extent and change is the primary focus of research.

* Assist with data processing for raster (image) and vector (polygon) datasets in support of ongoing research
* Conduct image interpretation, algorithm implementation, and data synthesis, as needed
* Conduct field work to support data collection efforts
* Support composition of written results for peer-review submission

**Thought Delivery Systems, Inc.** *– GIS Team Member & Project Manager* **February 2021-November 2022**

TDSI develops and deploys highly scalable solutions in the broadband, environmental, and media sectors, using mapping tools to visually display forests, energy networks, and trail systems, as well as electromagnetic frequency exposure and interference.

* Collected and digitized geographic data to create maps using QGIS
* Spearheaded a global project to map the locations of Champion Trees
* Created engaging visualizations of geographic data using StoryMaps and Mapbox online maps

**NASA Global Ecosystem Dynamics Investigation (GEDI), University of Maryland**

– *Faculty Assistant* **September 2021-September 2022**

GEDI aims to provide answers to how deforestation has contributed to atmospheric CO2 concentrations, how much carbon forests will absorb in the future, and how habitat degradation will affect global biodiversity. GEDI observes tropical and temperate forests using a self-contained laser altimeter on the International Space Station. My project goal is to adapt global forest biomass density datasets for use on a single country and use these results to analyze carbon sequestration potential.

* Traveled to Mozambique in June 2022 to assist in LiDAR data collection as part of a small team
* Edited a technical paper comparing two algorithms for classifying forest degradation
* Adapted existing forest biomass density code to create a dataset for the Democratic Republic of the Congo

**VOLUNTEER WORK**

**Potomac Appalachian Trail Club** – *Trail Maintainer & Crew Chief* **June-August 2020**

* Trail management, control of invasive species

**ACTIVITIES**

**UMD Ultimate Frisbee** – Strength coach **2022-present**

* Coached players through workouts in the weight room and on the field
* Directed injured players to appropriate specialists, as needed

**UMD Ultimate Frisbee** – *A Team Captain 2020-2022* **2018-2022**

* Led by example to motivate the team to improve skills, athleticism, and mental fortitude
* Integrated fitness into the team culture and work with injured players to help them rehabilitate

**SKILLS**

* Attended 3-day Terrestrial Laser Scanner training **April 2022**
* Fluent in French; received Seal of Biliteracy **July 2018**