**DENIN Environmental Scholars Internships**

Dates of internship: Jun 8, 2020 – Aug 14, 2020

Number of positions available: 1

Faculty Mentor: Jing Gao

**Project Title:** Data Retrieval and Analysis for Understanding Societal Responses to Global Environmental Change

**Research Description:**

Global environments are changing at unprecedented rates. Many of the changes cast substantial stress on human societies. Understanding how communities collectively perceive and respond to these environmental changes is essential for effective future planning and policy making. As an example, this project will examine current and past geospatial data, to understand American communities’ attitudes and behaviors related to climate change. The intern will assist the identification, retrieval, and analysis of pertinent datasets.

**Research Questions:**

1. What data sources are available for understanding aggregated environmental attitudes and behaviors in the U.S.?
2. What empirical relationships and patterns are present in observational data?

**Student Learning Objectives:**

This internship focuses on the development of the following professional and research skills.

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| Broad Professional Skills | Specific Skills |
| Planning and time management | Ability to set and complete specific goals of varying scope |
| Work independently | Independent work ethic - work independently to problem-solve |
| Collaborative skills | Learning to complete tasks efficiently and effectively with others |
| Express ideas in writing and verbally | Communicate with diverse audiences - Development of impactful poster and oral presentations. Honing ability to deliver scientific results to people of interdisciplinary background. |
| Broad Scientific Research Skills | **Specific Skills** |
| Understand scientific terms  | Theoretical and applied concepts regarding climate change, spatial analysis and modeling |
| Literature analysis | Ability to effectively find and utilize relevant scientific manuscripts |
| Use scientific tools | Data management and analysis software packages for geospatial data, especially statistical and spatial analysis tools. Design and generate effective figures and tables. |
| Recognize simple patterns in data analysis results | Apply scientific concepts to qualitative and quantitative data analysis results to interpret their scientific meanings |
| Understand, apply, and explain scientific concepts and theories | Form incremental research questions and plan methods for addressing challenges. Learn to effectively communicate results through oral presentations and writing. |

**Prerequisites:**

Proficiency with GIS and R programming.

**Work Environment and Expectations:**

Work from home and connect virtually with mentor. Intern will work full time during the 10-week project period. Hours are flexibly determined between intern and mentor. Intern will also participate in and present at project team meetings and DENIN symposiums.

**Stipend:**

$4,000 (direct deposit is required)

**Funding Source:**

National Science Foundation, Delaware EPSCoR Track I

**How to apply:** <https://ugresearch.udel.edu/PUB_Program.aspx>