SustNext Project: "Sustainability Next – Forming Teams Award: Forming Teams to Pursue Research on Community Resilience, Equity, Disasters, and Transportation"

Description
You will be part of a project focused on establishing a robust transdisciplinary team that will study how extreme events impact socially vulnerable populations. The goal of this planning project is to identify communities to work with, relevant stakeholders, and specific extreme weather events for future research. The future research aims to understand and alleviate the acute impacts of disasters on people’s mobility, improving their access to critical goods and services.

Your responsibilities will involve:

1. Assisting in identifying relevant stakeholders.
2. Assisting in the planning and execution of webinars, online in-depth interviews, focus groups, and in-person meetings with stakeholders.
3. Synthesizing and analyzing knowledge gathered from these activities.
4. Conducting literature reviews.

You will utilize various tools and resources, including databases, Microsoft Office applications, and tools for mixed methods and qualitative data analysis throughout the course of the project.

Additional Information

- Experience in Excel and R/Python required.
- Interest in Transportation Systems is preferred but optional.
- Interest in graduate school preferred.

Rate
For undergraduate research assistantship, $12.50 to 15/hr for approximately 5 - 10 hours per week.

How to Apply
Submit your application using this form: https://forms.gle/ezkoid8sMh8vFs7h7

Other Notes
Applications will be reviewed until the position is filled. The position will begin in Jan/Feb 2024.
SADR Project: "Consumer Adoption of Sidewalk Autonomous Delivery Robots for Home Deliveries"

Description
Sidewalk Autonomous Delivery Robots (SADR) are small, self-driving vehicles that transport goods and items on sidewalks or pedestrian pathways. You will be part of a project focused on understanding the relevant factors that drive consumers to adopt these services and the barriers and perceived risks from this technology is crucial for their effective integration into existing logistic operations. Your work will focus on understanding the role of behavioral biases as drivers of consumer adoption of SADR.

Your tasks include:
1. Conducting literature reviews.
2. Analyzing survey data.
3. Assisting in developing statistical models.

You will utilize various tools and resources, including Microsoft Office applications and tools for statistical analysis throughout the course of the project.

Additional Information
- Experience in Excel and R/Python required.
- Knowledge of multivariate statistical analysis required.
- Interest in Transportation Systems is preferred but optional.
- Interest in graduate school preferred.

Rate
For undergraduate research assistantship, $12.50 to 15/hr for approximately 5 - 10 hours per week. A for-credit research position is also available.

How to Apply
Submit your application using this form: https://forms.gle/ezkoid8sMh8vFs7h7

Other Notes
Applications will be reviewed until the position is filled. The position will begin in Jan/Feb 2024.
FUAs Project: "Mitigating Food Under-served Areas via Freight Transportation and Logistics"

Description

Food Under-served Areas (FUAs) are locations where communities lack access to nutritious foods. You will be part of a project focused on designing freight transportation solutions that bring nutritious foods closer to vulnerable populations. You will collaborate with a large team of multiple faculty and students across various universities. Your work will focus on investigating the various types of solutions that could be analyzed including leveraging current local retail networks, food bank networks, and last-mile delivery solutions (e.g., dark stores). There are multiple positions available for this project, so your work will depend on your expertise. Your tasks could include:

1. Conducting literature reviews.
2. Assisting in data collection and analysis.
3. Assisting in conducting spatial analyses via geographical information systems.
4. Assisting in developing and implementing optimization models via mathematical programming techniques.

You will utilize various tools and resources depending on your specific assignment, including Microsoft Office applications and tools for statistical analysis, spatial analysis, and mathematical programming throughout the course of the project.

Additional Information

- Experience in Excel and R/Python required.
- Experience in GIS is required for the spatial analysis focus.
- Knowledge of mathematical programming is required for the optimization focus.
- Interest in Transportation Systems is preferred but optional.
- Interest in graduate school preferred.

Rate

For undergraduate research assistantship, $12.50 to 15/hr for approximately 5 - 10 hours per week. A for-credit research position is also available.

How to Apply

Submit your application using this form: https://forms.gle/ezkoid8sMh8vFs7h7

Other Notes

Applications will be reviewed until the position is filled. The position will begin in Jan/Feb 2024.
Freight Resilience Project: "Leveraging Georgia’s Multimodal Network to Increase Freight Resilience"

Description
This research intends to assess Georgia’s potential to leverage its multimodal freight transportation infrastructure to increase the resilience of road freight operations to extreme weather events and climate change. You will be part of a planning project determining research avenues regarding freight resilience. Your work will focus on conducting a comprehensive review of the state-of-the-art and the state-of-the-practice of freight resilience. Your tasks may include the following, contingent on the project progress:

1. Conducting literature reviews.
2. Assisting in freight data collection and analysis.
3. Assisting in conducting spatial analyses via geographical information systems.

You will utilize various tools and resources, including databases, Microsoft Office applications, and tools for statistical and spatial analysis throughout the course of the project.

Additional Information
- Experience in Excel and R/Python required.
- Experience in GIS is required for the spatial analysis focus.
- Interest in Transportation Systems is preferred but optional.
- Interest in graduate school preferred.

Rate
For undergraduate research assistantship, $12.50 to 15/hr for approximately 5 - 10 hours per week. A for-credit research position is also available.

How to Apply
Submit your application using this form: https://forms.gle/ezkoid8sMh8vFs7h7

Other Notes
Applications will be reviewed until the position is filled. The position will begin in Jan/Feb 2024.
DRL-UAV Project: "Disaster Response Logistics via Mixed Truck and Unmanned Aerial Vehicles"

Description

Disaster response logistics encompass the logistic activities that happen in the aftermath of a disaster. These activities include the distribution of critical relief supplies within the disaster area. Unmanned Aerial Vehicles (UAV) provide an opportunity to enhance the relief distribution process. You will collaborate with a graduate student to develop logistic models for disaster relief distribution that improve traditional truck operations with UAV-mixed operations. Your work will focus on determining the state-of-the-art and the state-of-the-practice of this type of mixed system and investigating the various features to incorporate in the design of such a system. Your tasks may include:

1. Conducting literature reviews.
2. Assisting in data collection and analysis.
3. Assisting in developing and implementing optimization models via mathematical programming techniques.

You will utilize various tools and resources depending on your specific assignment, including Microsoft Office applications and tools for statistical analysis and mathematical programming, throughout the course of the project.

Additional Information

- Experience in Excel and R/Python required.
- Knowledge of mathematical programming is preferred to support model development.
- Interest in Transportation Systems is preferred but optional.
- Interest in graduate school preferred.

Rate

For undergraduate research assistantship, $12.50 to 15/hr for approximately 5 - 10 hours per week. A for-credit research position is also available.

How to Apply

Submit your application using this form: https://forms.gle/ezkoid8sMh8vFs7h7

Other Notes

Applications will be reviewed until the position is filled. The position will begin in Jan/Feb 2024.