Announcements

GIS Analyst for Northern Virginia Regional Trails, Sponsored by the Institute for a Sustainable Earth

Apply skills in GIS and cartography to enhance regional recreation and transportation trails. GIS data and maps are essential for planning a complete and high-quality regional trail network, enhancing community health activity, and promoting the region’s trail network to boost tourism and reduce road trips to make for a cleaner environment. Collaborate with team members from the Northern Virginia Regional Commission (NVRC) and the Institute for Sustainable Earth to assist with assessing existing jurisdiction bike/ped trails GIS data schemas and attribute values, along with researching national data standards. Provide recommendations on a regional data standardization solution that integrates the data and attributes existing across the region’s GIS layers, while at the same time seeking to adhere to national data standards for the region’s trails data. Migrate/maintain data and produce a technical report and GIS/map products that provides research findings.
**Required Skills:** Advanced undergraduate student pursuing a degree in Geography with a focus on GIS. Must be versed in basic research techniques, technical writing, GIS Desktop, ArcGIS Online, database design, and MS Office suite. **Applicants must be approved for Federal Work Study.** Accepting applications immediately, and the position is open until filled. Pay rate: $14.00/hour, for ~10 hours a week through the end of the Spring 2024 semester.

Questions? Contact Dr. Jeremy Campbell at the Institute for a Sustainable Earth: jcampb30@gmu.edu.

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**Summer Graduate Research Fellowships with Organizations on the Front Lines of Sustainability Challenges**

Co-sponsored by Mason’s Graduate Division and the Institute for a Sustainable Earth, the 2024 **Sustainability Summer Fellowships for Graduate Research Partnerships** program provides financial support and professional development to graduate students who will work with partner organizations on applied research projects. This opportunity is designed to connect students with organizations making a positive impact on our world. Together, fellows and partner organizations will identify research and action priorities for the period of the fellowship, allowing students to gain valuable experience and organizational access. Participants in the Sustainability Summer Fellowship program will then be able to leverage this research partnership in their dissertation or master’s thesis work.

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**In the News**
- Mason researchers studying zoonotic transmission pathways
- Forensic scientist reconstructs face of Roman crucifixion
- Drone masterclass helps students explore real-world problems for first responders
- New center will better support Mason’s student-athletes
- Mason postdoc leads scientific breakthrough that could revolutionize cancer treatment
- Cryptocurrency’s surprising transparency advantage

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**Events**

**How Microgrids Can Help Localities on Data Center and Critical Infrastructure Energy Challenges.** Enchanted Rock (Houston, TX) is one of the largest microgrid developers in the nation. Natural gas-powered microgrids provide localities an economically viable, quieter, and more environmentally friendly alternative to diesel-powered backup power for data centers and critical infrastructure. Microgrids also can meet electric demand requirements when utilities are delayed in providing power. Join NVRC and Enchanted Rock on January 30, 2024, at 12:00 – 1:00 pm to learn how microgrids can help localities on energy challenges around data centers and critical infrastructure.

Tuesday, January 30, 2024 | 12:00 PM (ET) | Click [here](#) to register.

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**Funding Opportunities**

**Heather’s Highlights:** Each week we will highlight current funding opportunities, alternating between the six ISE Research Themes.

**Research Theme 4: Clean Energy, Decarbonization, and Climate Action**

*The Department of Energy (DOE) is releasing a Funding Opportunity Announcement (FOA) entitled Bipartisan Infrastructure Law (BIL) Battery Materials Processing and Battery Manufacturing Grants.*

The mission of this grant program is to strengthen and secure manufacturing and energy supply chains needed to modernize the nation’s energy infrastructure and support a clean and equitable energy transition. DOE will hold an information Webinar on Jan. 24, 2024 at 11am EST. Click hyperlinked title above for registration link.

Application Due Date: March 19, 2024
Anticipated Funding Amount: Not Specified

**Research Theme 5: Enhancing Equality, Equity, and Access to Basic Goods and Services**
The National Science Foundation (NSF) and the Directorate for STEM Education has a program titled Racial Equity in STEM Education (EDU Racial Equity).

Proposals funded by this solicitation will: (1) substantively contribute to institutionalizing effective research-based practices, policies, and outcomes in STEM environments for those who experience inequities caused by systemic racism and the broader community; (2) advance scholarship and promote racial equity in STEM in ways that expand the array of epistemologies, perspectives, ideas, theoretical and methodological approaches that NSF funds; and (3) further diversity project leadership (PIs and co-PIs) and institutions funded by NSF.

Application Due Date: Annually – for 2024: October 8
Funding Amount: $500,000

Research Theme 6: Peace, Justice, and Strong Institutions to Support Thriving Economies

The National Science Foundation (NSF) and philanthropic partners announce $16 million in funding to prioritize ethical and social considerations in emerging technologies through the Responsible Design, Development, & Deployment of Technologies (ReDDDoT) program.

The key goal of the program is to support and strengthen collaborations across disciplines and sectors, for example, academia, industry, and non-profits. The program also aims to ensure that ethical, legal and societal considerations and community values are embedded across technology lifecycles to generate products that promote the public's wellbeing and mitigate harm.

Application Due Date: April 8, 2024
Funding Amount: $300,000

Student Opportunities

NASA MSI Incubator: Wildfire Climate Tech Challenge

NASA's Wildfire Climate Tech Challenge, part of the MSI Incubator initiative, seeks innovative solutions for wildfire prevention and climate technology. NASA invites students and employees of Minority Serving Institutions (MSIs) to address the escalating issues caused by wildfires exacerbated by climate change. Successful participants will have the opportunity to join a startup incubator program and compete for a prize of $100,000. Additionally, this initiative offers a platform for participants to present their ideas to venture capitalists and NASA experts, furthering the development of technology in the fields of wildfire prevention and climate change, while promoting inclusivity and diversity.

Click here to learn more.
Global Sustainability Scholars Fellows Program

The GSS Fellows program offers a 10-week paid immersive training and mentoring with a global sustainability organization. Fellows will gain professional work experience, receive professional mentorship and professional development training, and build an international professional network in sustainability science. We will accept 5 -10 fellows per year to join the GSS community, provide advanced professional development training, and build professional connections that foster opportunities for employment and/or graduate school opportunities.

Click here to learn more.

Center for Democracy and Civil Society Research Symposium

The annual Democracy and Governance Student Research Symposium will take place on March 20th, 2024 at Georgetown University. Hosted by the Center for Democracy and Civil Society, the symposium is an opportunity for graduate students from D.C., Maryland, and Virginia (DMV) universities who are focused on democracy and governance to present their independent research and projects, gain practical experience, and connect with established and young professionals in the field.

Click here to learn more.

2024 Climate & Health Equity Fellowship Applications

The Climate and Health Equity Fellowship was launched by The Medical Society Consortium on Climate & Health in recognition of the fact that climate change is both a health emergency and a major health equity issue. Throughout the U.S. there is a need for more diversity in climate and health leadership and a sharper focus on equitable climate solutions. The goal of the Fellowship is to empower doctors from populations that face greater burdens from climate effects and are under-represented in medicine to become leaders in climate and health equity education, advocacy, and policy solutions.

Click here to learn more.

José E. Serrano Educational Partnership Program with Minority Serving Institutions (EPP/MSI)

The EPP/MSI Undergraduate Scholarship provides funds for two years of undergraduate study to rising junior undergraduate students majoring in Science, Technology, Engineering and Mathematics (STEM) fields that directly support NOAA's
The Institute for a Sustainable Earth (ISE) aims to connect members of the Mason community with others across the Mason community—and with other communities, policy-makers, businesses and organizations—so that, together, we can more effectively address the world’s pressing sustainability and resilience challenges.

The ISE Newsletter provides up-to-date information on conferences, funding opportunities, and research pertaining to environmental science and sustainability. The biweekly newsletter aims to facilitate information sharing among researchers, practitioners, and relevant local, national, and international organization.
Subscribe to our email list.