**APPLICATION DEADLINE:** February 15, 2019

PROJECTED START DATE April 1, 2019

School for Environment and Sustainability, University of Michigan

## **Open Position: Data Scientist/Specialist for Sustainability**

The Urban Sustainability Research Group led by Assoc. Prof. Joshua Newell seeks applications for a **Data Scientist**/ **Specialist**, beginning April 2019. The successful applicant will perform **data analysis and computer programming in support of current and upcoming research projects**. Examples of ongoing and planned projects include: 1) analysis of the environmental and social impacts of urban agriculture across multiple scales; 2) urban meat production-consumption patterns and dynamics; 3) a carbon footprint of the United States building stock; and 4) mapping the spatial and temporal dynamics of supply chains using trade data. The successful candidate will have the opportunity to join a growing, dynamic research lab that interfaces with the academy, industry, and society.

**Qualifications:** A PhD is desirable but not required. Candidates with degrees in Computer science, Statistics, Data Science, or a related field are well-suited for this position. Candidates must have experience managing and analyzing big data within high-performance computing (HPC) clusters (e.g. within Hadoop environments) and a solid foundation in statistical analysis. Basic familiarity with geospatial datasets and graph theory are bonuses. Candidates should have both strong communication (spoken and written) and interpersonal skills, and the ability to work independently and with a team of students and researchers. The ideal candidate will have excellent quantitative and analytical skills, preferably demonstrated through peer-reviewed academic publications.

Read more about the Urban Sustainability Research Group

**Responsibilities:** The Data Scientist/ Specialist will have two main responsibilities.

- 1. Address the analytical and programming needs of the group by developing efficient data mining techniques for very large datasets (in the 100s of GBs to TBs dimension).
- 2. Support analysis of these data using graph theory, statistical models, machine and deep learning, and related methods within high-performance computing (HPC) clusters.

**Position Details:** Salary is competitive and commensurate with experience and qualifications. Benefits are excellent and include employee health and dental insurance. The position is initially for one year, with the potential to extend to two years or more based on performance.

**Background:** The University of Michigan is one of the world's premiere research universities, offers rigorous academic programs, outstanding faculty, and diverse cultural and social opportunities in a stimulating intellectual environment. The School for Environment and Sustainability (SEAS)'s overarching mission is to contribute to the protection of the Earth's resources and the achievement of a sustainable society. Through research, education, and outreach, the faculty, staff, and students are devoted to generating knowledge and developing policies, techniques, and skills to help practitioners manage and conserve environmental resources to meet the full range of human needs on a sustainable basis. SEAS is a diverse collection of natural scientists, social scientists, engineers, and designers working collectively in an integrative setting.

**Application Instructions:** Applicants should send: 1) a CV; 2) a 2-page cover letter that a) details their interest in the position, and b) outlines their relevant skills and experience; 3) names and contact details (email addresses and telephone numbers) for three references, to Dr. Dimitris Gounaridis (dgounar@umich.edu). Please bundle all materials as one pdf file. Contact Dr. Dimitris Gounaridis should you have questions. The application deadline is February 15, 2018.