Postdoctoral Research Fellow and PhD student positions in Sustainable Systems Engineering

The University of Michigan School for Environment and Sustainability (SEAS, www.seas.umich.edu) is seeking two postdoctoral Research Fellows and one PhD student to participate in a variety of research projects in the broad field of sustainable systems engineering.

The first postdoctoral Research Fellow position will primarily participate in the CAREER project funded by the US National Science Foundation to develop computational methods for estimating data often missed in life cycle assessment (https://www.nsf.gov/awardsearch/showAward?AWD_ID=1554349). In addition, the Research Fellow will also be expected to explore other applications of emerging data science methods in sustainable systems engineering. The position is available immediately. Desired qualifications include:

- PhD degree in engineering, statistics, computer science or related field award within the past 3 years
- Programming or machine learning skills
- Advanced statistics and probability
- Experience managing large-scale datasets
- Knowledge in industrial ecology, particularly life cycle assessment
- Excellent verbal and written communication skills in English
- Demonstrated ability to work independently and as part of a team and a drive to create own research directions

The second postdoctoral Research Fellow position will primarily work on a project jointly funded by the US National Science Foundation and the National Natural Science Foundation of China on integrated modeling of urban food-energy-water (FEW) nexus (https://www.nsf.gov/awardsearch/showAward?AWD_ID=1605202). In particular, the Research Fellow is expected to integrate risk analysis in the project to evaluate risks associated with the FEW nexus. Broadly, the Research Fellow is also expected to participate in other risk-related projects. The position is available immediately. Desired qualifications include:

- PhD degree in engineering or related field award within the past 3 years
- Risk analysis
- Programming skills
- Knowledge in industrial ecology, particularly material flow analysis, input-output analysis
- Excellent verbal and written communication skills in English
- Demonstrated ability to work independently and as part of a team and a drive to create own research directions

The PhD student is expected to enroll in Fall 2018 through either School for Environment and Sustainability (www.seas.umich.edu) or Department of Civil and Environmental Engineering (cee.umich.edu) at the University of Michigan. The student is expected to work on the intersection of data science and sustainability. Experience and skills in programming and machine learning, knowledge in sustainable systems engineering, and broad interests in interdisciplinary research on environment and sustainability are required

For more information about the group's research, please visit http://www.mingxugroup.org/

Informal inquires and applications (including a cover letter, CV, and contact information of three references) should be directed to Prof. Ming Xu (mingxu@umich.edu).