We are excited to recruit self-motivated students with a wide range of interests, such as climate change, complexity science, computer modeling, food systems, land use and land cover change, remote sensing, resilience, systems integration (e.g., integration of natural sciences with social sciences, policy, and technology), sustainability, telecoupling, and/or metacoupling.

The students will join a transdisciplinary and multi-institutional USDA-funded research project and pursue a PhD or MS degree at Michigan State University. This project will investigate the complex interactions and cumulative impacts of multiple shocks (e.g., climate change, disease outbreaks) on the resilience and sustainability of agri-food systems in the U.S. Midwest and beyond. One student will focus on land use and land cover change under multiple shocks using various sources of data (e.g., satellite, field data), while the other will focus on the integration of multiple shocks into a multi-agent-based model to understand the complexity of ecological and socioeconomic changes. Both students will lead and participate in data collection and analysis, result interpretation, preparation of documents for publication in different outlets, including peer-reviewed and education/extension materials, and presentations at various meetings and conferences.

With flexible start dates (e.g., spring, summer or fall of 2024), the successful candidate will have opportunities to interact and work with a large transdisciplinary team with expertise in agricultural economics and supply chain management, artificial intelligence and digital agriculture, food and nutritional science, modeling, remote sensing, social network analysis, K-12 educational outreach, rural development, science communication, system integration, sustainability, and sustainable food systems and food security, to explore new frontiers of interdisciplinary and transdisciplinary research.

Application materials include: (1) a letter of application, (2) CV or resume, (3) transcripts, (4) GRE scores, (5) TOEFL scores (for non-native English speakers only), and (6) list of 3 referees (names and contact information). Unofficial copies of the transcripts, GRE, and TOEFL are OK initially.

Applicants are encouraged to submit their application materials as soon as possible. Reviews of applications will continue until a suitable candidate is identified. Please e-mail any questions and application materials to:

Dr. Jianguo (Jack) Liu Rachel Carson Chair in Sustainability <u>liuji@msu.edu</u> (email) Dr. Andrés Viña
Assistant Professor
vina@msu.edu (email)

http://csis.msu.edu/people/jianguo-jack-liu

 $\underline{https://www.canr.msu.edu/people/andres\_vina}$ 

Center for Systems Integration and Sustainability Michigan State University East Lansing, MI 48823-5243, USA