

The Digital Agricultural Group at the University of Minnesota – Twin Cities is recruiting a postdoctoral researcher with a background in remote sensing data analysis and crop modeling. The successful candidate will work on using satellite imagery to investigate agroecosystems, focused on assessing the impacts of climate change on yield and production risks, mapping staple and tree crops, quantifying land use changes, and predict agricultural carbon dynamics. Potential projects may also involve modeling and application of machine learning techniques. The successful candidate will be supervised by Dr. Zhenong Jin (<https://umn-digitalag.com/>) in the Department of Bioproducts and Biosystems Engineering and will work closely with a diverse group of research and industrial collaborators.

Essential Qualifications:

All applicants are expected to have a strong quantitative background, and a doctoral degree in a field such as earth and atmospheric science, hydrology, ecology, agronomy, geospatial systems, environmental science, or closely related fields. In addition, the ideal candidate will have:

- Demonstrated expertise in satellite remote sensing, image analysis, and mapping
- Experience with crop classification and yield or biomass quantification
- Knowledge of machine learning and/or processes-based modeling techniques, data analysis, or familiarity with a programming language.

Preferred qualifications:

- A PhD degree earned within the last three years.
- Strong data visualization skills.
- Effective writing ability and experience in preparing results for scientific publication.

Starting Date: The preferred start date is in early 2023 or sooner. The position will remain open until filled.

Application Process: Qualified candidates must send a short introduction email, including CV and a sample publication to Dr. Zhenong Jin (jinzn@umn.edu). Qualified applicants will be immediately reviewed upon receiving the application, although the search may continue until the position is filled. Due to time constraints, we only give feedback to those candidates who we plan to interview. For further questions, please feel free to reach out to us.

About the Lab: We are a group of people who are passionate about use-inspired research that integrates multiple disciplines to advance science that guides sustainable and precision agricultural management. With funding support from NSF, DOE, NASA, USDA, and others, our group members span the spectrum of process-based modeling, data-model fusion, and algorithm development for remote sensing. We look forward to having you join us and tackle big challenges with innovation!