Position: Postdoctoral Agroinformatics Researcher, University of Minnesota

Percent time: 100%
Term: 24 mo (6/9/2020 – 6/19/2022)
Supervisor: Kevin Silverstein, Operations Manager GEMS, University of Minnesota
Campus Location: 305 Cargill, St. Paul Campus

POSITION OVERVIEW
We are looking for a recent PhD graduate with knowledge of soil health management systems and their impacts in agricultural systems. The postdoctoral research assistant will conduct research and collaborate with scientists within the GEMS platform and with scientists and field managers at the Soil Health Partnership (SHP).

Research will focus on one or more of the following topics: agronomic outcomes associated with the adoption of soil health practices and management systems (e.g. yield or yield variability), the impact of soil health practices and management systems on soil health, and the economics of input use in soil health management systems. Primary tasks will include: research through modeling and data visualization; and preparing reports, presentations, and manuscripts for submission to scientific journals and industry audiences. The postdoc may also represent the Soil Health Partnership at scientific meetings, conferences, or other events.

GEMS Agroinformatics
GEMS, a joint CFANS and MSI (Minnesota Supercomputing Institute) agroinformatics initiative of the University of Minnesota, is a highly diverse international and interdisciplinary team of professionals. GEMS is re-imagining the relationships between data, institutions, and disciplines to inform and accelerate innovation within the food and agricultural sectors. The GEMS Agroinformatics Initiative makes genomics, environmental, management, and socioeconomic data inter-operable at varying spatial and temporal scales to generate actionable information and promote new innovation partnerships that accelerates and sustains growth in local and global food and agricultural systems.

For more information about GEMS and the scope of its programs, visit www.agroinformatics.org.

Soil Health Partnership
The Soil Health Partnership partners with farmers to explore the economic and environmental benefits and risks of soil health practices. Administered by the National Corn Growers Association (NCGA), the partnership has data from more than 220 working farms in 16 states. SHP promotes the adoption of soil health practices for economic and environmental benefit.

For more information, visit https://soilhealthpartnership.org
POSITION RESPONSIBILITIES
This is a 100% research position. Estimated time allocation is as follows:
• Research and analysis investigating one more independent research questions pertaining to soil health, crop yield/yield variability, or input use in the Soil Health Partnership network (50%)
• Data visualization and exploratory analysis (20%)
• Manuscript preparation, presentations, and report generation (20%)
• Communication and collaboration with the Soil Health Partnership and their research collaborators and stakeholders (10%)

REQUIRED QUALIFICATIONS
• PhD in data science, agronomy, geography, soil science, agricultural economics, or related field
• Strong publication record
• Working knowledge of row crop production, U.S. agricultural supply chains, and soil health practices and management systems
• Experience with modeling, data visualization, and analysis in R and/or python programming languages

PREFERRED QUALIFICATIONS
• Agronomy training or experience, including understanding of nutrient use and application in agricultural systems
• Experience handling large datasets
• Excellent communication and organization skills and ability to prioritize multiple tasks

How to Apply
Applications must be submitted online via the University of Minnesota. To be considered for this position, please proceed to the position description on the University of Minnesota website, click the Apply button and follow the instructions. You will be given the opportunity to complete an online application for the position and attach a cover letter and resume.

Application Link: https://z.umn.edu/GEMS-SHP