Position Description
Research Specialist (two positions)
Agricultural & Biosystems Engineering Department
North Dakota State University

The Department of Agricultural & Biosystems Engineering (ABEN) at North Dakota State University, invites applications for two research specialist positions to conduct research in the field of precision agriculture. The initial appointment is for 12 months with extension possible depending on satisfactory performance and funding.

This position is grant funded by USDA Genetics and Sustainable Agriculture Research Collaboration Project — specifically for using sensors, automation systems, robotics, unmanned aerial systems (UAS), artificial intelligence, big data management systems, and bioinformatics tools in precision management of North Dakota soils, crops, and weeds. The research will focus on major crops of North Dakota such as corn, soybean, and dry edible beans. Key responsibilities for a successful candidate will include:

- Assisting the project investigators and collaborators in designing, preparing and completing research experiments encompassing all areas of precision agriculture as well as preparing manuscripts for publication.
- Providing precision agriculture research assistance to faculty and staff members as well as student researchers in the Department of Agricultural & Biosystems Engineering.
- Assisting in the collection and processing of data produced from UAS, robotic systems, and sensors.
- Establishing of a Smart Farm where the farm is managed based on data collected, and decisions made from the information in the data.
- Supporting the PI and Co-PIs in the development of new and existing projects towards the goal of advancing research and disseminating results through reports, presentations and refereed journal publications.
- On-site field visits to collect instrumentation data.

Minimum Qualifications:
- M.S. degree in agricultural/biological/biosystems engineering or a closely related discipline.
- Research experience in precision agriculture areas such as sensors, UAS remote sensing, artificial intelligence, machine learning, robotics, and/or plot experiments to understand the interaction of genetics, environment and management.
- Ability to work as a multidisciplinary team member.
- Ability to interact & collaborate effectively with a diversity of colleagues and students.
- Ability to communicate effectively, with excellent oral and written communication skills, especially in scientific communication.
- Have a valid driver's license with the ability to travel to remote field sites.

Preferred Qualifications:
- Knowledge of agronomy, plant science or closely related discipline.
- Knowledge of statistical software (e.g., SAS, SPSS) and Microsoft Office packages.
• Knowledge of image analysis (e.g., C, C++, Python, LabVIEW and/or MATLAB).

**Salary:** The position offers a competitive salary and benefits package.

**Application Deadline:** Initial screening of applicants will begin November 13, 2018 and continue until suitable candidates are selected. Applications received by the screening date will be given full consideration.

**Special Instructions to Applicants:**
The application should include the following:
- Cover letter
- Curriculum vitae
- Transcripts of all university degrees
- Names, titles, addresses, phone numbers and e-mail addresses for three references

**Weblink:**
https://jobs.ndsu.edu/postings/9804

For further inquiries about this position, please e-mail Dr. Xin (Rex) Sun, Search Committee Chair at xin.sun@ndsu.edu. Include a phrase such as “Inquiry into ABEN Research Specialist Position” in the subject line.

**EO/AA Statement:**
North Dakota State University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, age, disability or veteran status. Women & traditionally underrepresented groups are encouraged to apply.