

**GRADUATE RESEARCH ASSISTANTSHIP IN
SPATIAL VARIABILITY – CROP YIELD RELATIONSHIPS**

The University of Nebraska-Lincoln (UNL) invites applications for an MS or PhD graduate research assistantship. The candidate in this assistantship will support work to improve an understanding of spatial variability underlying crop yields and associated producer profitability. Specifically the student will investigate the relationship of the National Commodity Crop Productivity Index (NCCPI), an index in the SSURGO database, to crop yields in Nebraska. These efforts will provide a research-based assessment of the ability of the NCCPI to predict crop yields in Nebraska. The selected candidate will join a collaborative research team involving faculty in Spatial Sciences (Dr. Yi Qi; <https://www.qispatial.com/>), Cropping Systems (Dr. Andrea Basche; <https://agronomy.unl.edu/basche-research>), and Applied Wildlife Ecology (Dr. Andrew Little; <https://wildlifecologylab.unl.edu/>).

Responsibilities for the student will include:

- Data collection, organization, and analysis of relevant field-scale yield data
- Evaluate the spatial relationship of crop yields to the National Commodity Crop Productivity Index (NCCPI)
- Conduct spatial analysis and quantitative data analysis to identify hotspots of marginal or less productive regions and mapping their relationship to the NCCPI
- Develop map products to allow for visualization and interpretation of results

Qualifications: Applicants must have completed a minimum of a Bachelor of Science degree in a field related Geographical Information Systems, Remote Sensing, and Data Analytics. Applicants should have a GPA ≥ 3.0 . Applicants also should have strong quantitative skills (e.g. correlation analysis, regression analysis) and organizational skills, attention to detail, and excellent oral and written communication skills. Preference will be given to applicants with prior experience or training with GIS (e.g. Esri ArcGIS develop and ArcGIS online), Remote Sensing (e.g. ENVI) or similar software.

GRA Stipend:	Starting salary \$22,000 for M.S. or \$24,000 for Ph.D.
Tuition Waiver:	A tuition waiver of up to 12 credit hours per semester and 6-12 credit hours during summer sessions (depending on previous enrollment) is provided with the GRA.
Health Insurance:	Students on assistantships are provided health insurance at a reduced rate.
GRA Availability:	Summer or Fall 2020
Application:	To be considered for this position, please send a cover letter outlining your interests, research background, and career aspirations as they pertain to this position; a resume or curriculum vitae; copies of transcripts (unofficial); unofficial copies of GRE scores; and contact information for 3 professional references (name, email, phone, address) combined in a single PDF file with the file name formatted as lastname_firstname to Dr. Yi Qi (yi.qi@unl.edu). Review of applications will begin immediately and the position will remain open until filled.

UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity. UNL does not discriminate in its employment. Admissions or related service programs. Affirmative Action/Equal Opportunity/Diversity questions maybe directed to the Office for Affirmative Action and Diversity Programs, 127 Administration Building, P. O. Box 80437, UNL, Lincoln, NE 68588-0437, or by telephoning 402472-3417 (or TDD, 402/472-9522). Employment eligibility verification is required for all new hires pursuant to the Immigration and Control Act of 1986. We assure reasonable accommodation under the Americans With Disabilities Act.