

# Junxiao Zhang

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Department of Biological Systems Engineering, University of Nebraska-Lincoln

## Education:

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<b>B.S. Agricultural Engineering</b>	<b>2021</b>
<i>Department of Food, Agriculture and Biological Engineering, The Ohio State University, Columbus, Ohio</i>	
<b>M.S. Agricultural &amp; Biological Systems Engineering</b>	<b>2023</b>
<i>Department of Biological Systems Engineering, University of Nebraska-Lincoln, Lincoln, Nebraska</i>	
<b>PhD. Biological/Biological Systems Engineering</b>	<b>Present</b>
<i>Department of Biological Systems Engineering, University of Nebraska-Lincoln, Lincoln, Nebraska</i>	

## Research Experiences:

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<b>University of Nebraska-Lincoln</b>	<b>June 2021 ~ Present</b>
Graduate Research Assistant. Department of Biological System Engineering	
Advisor: Dr. Yufeng Ge	
Research area: High-Throughput Plant Phenotyping	

## Teaching Experiences:

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### Undergraduate Teaching Assistant

*FABE 3130 Heat & Mass Transfer taught by Dr. Dennis R. Heldman, Spring 2021*

*FABE 3150 System Dynamic & Electricity taught by Dr. Michael Jay Lichtensteiger, Spring 2021*

- Graded students' assignments and exams, answered students' questions during the lab, and helped the professor to prepare the experimental equipment.

### Teaching Assistant

*BSEN 460 Instrumentation & Controls taught by Dr. Yufeng Ge, Autumn 2022*

- Graded students' assignments, taught labs, and helped the professor to prepare the experimental equipment.

*BSEN 260 Instrumentation I by Dr. Greg Bashford, Spring 2024*

- Graded students' assignments, taught labs, and helped the professor to prepare the experimental equipment.

## Award & Professional Activities:

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- Student Member (Since 2021), American Society of Agricultural and Biological Engineers
- 2022 David H. and Annie E. Larrick Graduate Student Travel Award, University of Nebraska-Lincoln
- Website Editor (Since 2022), the Association of Overseas Chinese Agricultural, Biological, and Food Engineers
- Student Member (Since 2022), North American Plant Phenotyping Network
- Secretary (Since 2023), the Association of Overseas Chinese Agricultural, Biological, and Food Engineers
- 2024-2025 Milton Mohr Fellowship, University of Nebraska-Lincoln

## Conference Presentations:

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1. **Junxiao Zhang**, Kantilata Thapa, Geng Bai, Yufeng Ge. (2022). Estimating Winter Wheat Stomatal

Conductance Using Thermal and Spectral Imaging, Weather Variables, and Machine Learning. ASABE 2022, Houston, TX.

2. **Junxiao Zhang**, Nipuna Chamara, Kantilata Thapa, Geng Bai, Yufeng Ge. (2023). Estimating Maize and Soybean Stomatal Conductance Based on Time Series Canopy Temperature, NDVI and Weather Conditions. NAPPN 2023, St. Louis, MO.
3. Kantilata Thapa, **Junxiao Zhang**, Geng Bai, Yufeng Ge. (2023). Characterization of Maize Responses to Differential Nitrogen Rates using Image-Based Phenotyping. NAPPN 2023, St. Louis, MO.
4. **Junxiao Zhang**, Nipuna Chamara, Kantilata Thapa, Geng Bai, Yufeng Ge. (2023). Estimating Crop Stomatal Conductance from RGB, NIR, and Thermal Infrared Images. SPIE 2023, Orlando, FL.
5. **Junxiao Zhang**, Nipuna Chamara, Geng Bai, Yufeng Ge. (2024). Diurnal Variation of NDVI for Soybean and Maize under Different Water Treatments. NAPPN 2024, West Lafayette, IN.

### **Publications:**

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1. **Junxiao Zhang**, Kantilata Thapa, Nipuna Chamara, Geng Bai, Yufeng Ge, "Estimating crop stomatal conductance from RGB, NIR, and thermal infrared images," Proc. SPIE 12539, Autonomous Air and Ground Sensing Systems for Agricultural Optimization and Phenotyping VIII, 125390A (13 June 2023); <https://doi.org/10.1117/12.2663888>