



Position

Dr. Zhihang Song at the Department of Horticulture is seeking a **Ph.D. Student Research Assistant** in the Controlled Environment Agriculture (CEA) Lab. Preferred start dates are Summer or Fall 2025. Joining this research group will provide you with the opportunity to learn and conduct cutting-edge research and development of high-throughput, high-precision, and automated plant phenotyping systems in controlled environments. Potential research topics include but are not limited to 1) high-throughput indoor plant phenotyping systems, 2) plant nutrient and drought status identification and resource optimization, 3) automated real-time crop management and environmental control with Ag IoT (Internet of Things), 4) multi-dimensional plant growth condition monitoring with integrated sensors and robotics. Students will be encouraged and expected to publish research work in high-quality journals and national or international conferences. A full Graduate Assistantship with tuition coverage, competitive stipend, and benefits will be offered.

Requirements:

- M.S. or B.S. degree in Horticulture, Plant Science, Mechanical/Agricultural/Electrical Engineering, or other related fields.
- Strong interest in working on CEA horticultural research projects.
- Proven track record of peer-reviewed publications.
- Fluent oral communication and strong writing skills in English.
- Strong analytical thinking, self-motivation, independent learning, and teamwork mindset.
- Strong hands-on crafting and development capabilities.
- Solid academic ethical background.

Preferred qualifications:

- Students with an engineering background who hold a strong interest in horticulture.
- Technical skills in:
 - Computer programming (e.g., Python, MATLAB, C++, etc.),
 - CAD & Simulation (SolidWorks, Autodesk Fusion, CFD, etc.),
 - Rapid prototyping (3D print, micro-controller)
- Students with 3+ experience in the following fields: plant phenotyping, plant physiology, computer vision, statistical analysis, deep learning, spectral image analysis, robotics, or other topics in precision agriculture.

To apply*:

Email the following materials in PDF format to Dr. Zhihang Song via zsong@uga.edu.

- Email subject: "Applying for Ph.D. graduate assistantship 2025 -- [YOUR NAME]"
- A max 600-word cover letter 1) introducing your previous research experiences and 2) describing your research interests and Ph.D. plan in detail.
- CV/Resume, which outlines your education, experience, skills, awards, and publications.
- Unofficial transcripts of college degree(s).
- At least three reference contacts or letters.

Note:

- Candidates should expect 1 -2 rounds of interviews during the recruiting process.
- International students may need to submit TOEFL/IELTS and GRE certificates upon official submission.