IoT4Ag
The Internet of Things for Precision Agriculture
a U.S. NSF Engineering Research Center

PURDUE UNIVERSITY | Open Ag Technology and Systems Center

Immediate Openings – Funded Summer 2025 Positions
Student Research Assistants in User Interface Design

The U.S. National Science Foundation Engineering Research Center for the Internet of Things for Precision Agriculture (IoT4Ag) and the Purdue Open Ag Technology and Systems (OATS) Center are seeking undergraduate and graduate students to join the *Solar-Powered Remote IoT4Ag Network Gateway (SPRING)* project during **Summer 2025**. This initiative enhances in-field data collection and analysis through open-source hardware and software, with direct benefits to both agricultural stakeholders and educators.

Project Overview

This project involves developing self-contained hardware kits for classroom teaching, based on existing SPRING project designs. In parallel, we aim to enhance the data analysis portal's graphical interface, making it more intuitive and accessible to non-technical users.

As part of the ***IoT4Ag E³ Portfolio (Excite–Educate–Enable)*** initiative, selected students will take part in a **10–12 week** summer research experience and collaborate with educational experts to develop teaching materials that leverage our data collection platform.

Candidate Requirements

We welcome applicants from undergraduate and graduate programs across a broad range of disciplines. Relevant backgrounds may include, but are not limited to:

- Electrical and Computer Engineering
- Mechanical Engineering
- Computer Science
- Computer and Information Technology Proficiency

Preferred Skills

- Experience in hardware prototyping and embedded systems
- Familiarity with user interface or front-end design tools

What We Offer

- A collaborative, interdisciplinary research environment
- Opportunities to publish and present at top-tier conferences
- Mentorship from faculty and research staff

- Funded research assistantships
- Immediate openings for summer 2025

About IoT4Ag and OATS

IoT4Ag is a U.S. National Science Foundation-funded Engineering Research Center (ERC) launched in 2020, uniting expertise in agronomy, agricultural engineering, communications, economics, environmental science, electrical and computer engineering, cyber systems, social science, and more to develop and deploy precision agriculture technologies to address the global grand challenges of food, energy, and water security.

The OATS Center at Purdue addresses critical challenges in data-driven agriculture and rural development by promoting open-source data exchange and advancing trusted, automated, and interoperable systems to improve efficiency across the agricultural sector.

To Apply or Learn More

Contact **Dr. Yaguang Zhang** at ygzhang@purdue.edu.

Additional Purdue-based, funded summer opportunities are also available for **students, pre-service teachers, and K–12 educators**. Please reach out to Dr. Zhang for more details about these positions.

Visit these links for additional resources:

- https://iot4ag.us/for-k-12-educators/
- https://oatscenter.org/#projects