BSc./MSc. internship

Make AI useful for plant science

Background & aim

openJII is an open-source platform for photosynthesis research, developed by the Jan IngenHousz Institute. We are developing an AI assistant that helps scientists find methods, understand their data and prepare research workflows. A local prototype exists; shared deployment and scientific validation are the next steps.

Institute: Jan Ingenhousz Institute

Theme: Data science/AI

Type of experiment: Computational

Location: Radix or hybrid

In this thesis internship, you will work with scientists to choose one useful task (such as answering literature questions) and test what makes the AI assistant better at it. You build or use a baseline, find where it fails, and evaluate a targeted improvement in model choice, prompting or retrieval. You measure answer quality, response time and cost against expert-reviewed questions. Bachelor's students deliver one bounded contribution, and Master's students run a controlled comparison study.

The project is suitable for students in AI, data science or computer science who have Python skills and an interest in LLMs.





Tasks

- Work with scientists on a real question
- Build or use a baseline
- Test a prompt
- Model or retrieval change
- Explain whether it helps

Jan IngenHousz Institute

The Jan IngenHousz Institute (JII) is an open science research institute dedicated to improving photosynthesis to enhance global crop productivity, sustainability, and climate resilience. JII brings together expertise in engineering, data science, plant biology, biophysics, genetics, and breeding. We develop innovative sensors, research methods, and data analysis platforms that enable collection and interpretation of real-time field measurements of photosynthesis.

Located on the campus of Wageningen University, JII offers a dynamic, interdisciplinary environment where curiosity meets impact. If you're a student eager to apply your knowledge to photosynthetic efficiency challenges, this is your opportunity!

For more information, contact **Dominik Vrbic** (dominik.vrbic@jii.org)



Jan IngenHousz Institute