



Subject to final approval by the Federal Ministry of Education and Research, the Department of Artificial Intelligence in Agricultural Engineering is looking for a

Postdoctoral researcher (m/f/d)

The research position will be fully funded (100 %) for the project duration of 36 months. Part-time employment is possible. Given eligibility, salary is based on TV-L EG 14, and EG 13 otherwise.

YOUR TASKS

In the scope of a joint research project on the topic of 'High Performance Sensor Technology for Smart Crop Protection', funded by the German Federal Ministry of Education and Research (BMBF), you will work in a motivated team of scientists and together with renowned industrial partners. You will conduct research in the overarching topic area of Artificial Intelligence (AI) for smart spraying applications, in particular in the areas of:

- 1. Computer vision:** AI-based optimization of the efficiency of deep learning-based object detectors for weed detection.
- 2. Model compression:** exploring methods to increase inference efficiency using techniques such as network pruning, knowledge distillation, and neuroevolution.
- 3. Meta learning:** exploring methods to increase data efficiency in training and adapting object detectors to new environmental conditions.

Your activities will include the scientific development of new findings and methods in the above-mentioned areas, writing of scientific publications, co-supervision of doctoral students in the project, as well as the self-organized and agile project work in the research consortium. The possibility of postdoctoral qualification (habilitation) during the project period is given.

YOUR PROFILE

Excellent completion of a PhD in Computer Science (or a closely related field), ideally with a focus on Deep Learning and Computer Vision. Experience in (co-)supervision of PhD students is essential. Proficiency in written and spoken German as well as very good English skills are required. Profound programming skills, especially with common Deep Learning frameworks are a distinct advantage. Strong organizational and communication skills complete your profile.

Severely disabled persons will be given preference in the case of equal suitability. Since the university would like to increase its proportion of female scientists, applications from women are particularly welcome.

Your application should include at least the following documents: Letter of motivation, your curriculum vitae, a current list of publications, as well as references and certificates.

The application deadline is **September 18, 2022**.

Please submit your application via the job vacancies portal of the University of Hohenheim: <https://www.uni-hohenheim.de/en/job-openings>. Alternatively, send your application documents via email directly to our department: AI-AgEng@uni-hohenheim.de