

Scientist (f/m/d) - part-time position

Stellenanbieter: Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF) e.V.

The mission of the Leibniz Centre for Agricultural Landscape Research (ZALF) as a nationally and internationally active research institute is to deliver solutions for an ecologically, economically and socially sustainable agriculture – together with society. ZALF is a member of the Leibniz Association and is located in Müncheberg (approx. 35 minutes by regional train from Berlin-Lichtenberg). It also maintains a research station with further locations in Dedelow and Paulinenaue.

The Research Platform "Data Analysis and Simulation" at ZALF, within the Working Group "Multi-Scale Modelling," invites applications for a highly motivated researcher to join the project "Promoting Agricultural Resilience with Al-based Modeling and Value Chain Analysis" (PARAM-VC).

The position focuses on the development and validation of an Al-based Hybrid Crop Modelling Framework, integrating Process-Based Models (PBMs) with Machine Learning (ML) to enhance the accuracy and interpretability of crop yield forecasts, while evaluating key ecosystem services (e.g., soil carbon sequestration, nutrient storage, and water quality).

We offer a temporary **80% part-time position until September 30, 2028** (subject to final funding confirmation), located in Müncheberg.

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53-2025

Your tasks:

- Design and implement a modular hybrid modelling framework that integrates Process-Based Models (PBMs) (e.g., Lintul5, APSIM) with Machine Learning (ML) approaches.
- Calibrate models using high-resolution drone data and remote sensing indicators such as canopy temperature and disease severity.
- Develop and apply generative ML models to produce spatio-temporal yield forecasts.
- Leverage Google Earth Engine and ML techniques to segment croplands and generate landscape-scale farming system maps.
- Validate outputs using ground truth data and open-access databases (e.g., EuroCrops, FAOSTAT).

Your qualifications:

- A completed Master's degree in Agricultural Engineering, Environmental Science, or Geoinformatics.
- Sound expertise in remote sensing applications, big data integration, and the



development and application of deep learning models.

- A solid understanding of hybrid modelling concepts, particularly the integration of process-based models and machine learning.
- Programming experience in Python and Java; strong Java skills are especially desirable.
- Proficiency in English, with excellent skills in both writing and speaking.

What we offer:

- An interdisciplinary working environment that encourages independence and selfreliance
- Classification according to the collective agreement of the federal states (TV-L) up to EG 13 (including special annual payment) a collegial and open-minded working atmosphere in a dynamic research institution
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- ZALF offers a company ticket for public transport
- Flexible working hours and family-friendly conditions (mobile work of max. 40% monthly working time is possible given reconciliation with the project requirements)
- Budget for conferences, meetings
- In-house language courses in German and English

Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favored. The filling of the position in part-time is possible in principle. Please send your application, preferably online (see button online application below). For email applications, create a PDF document (one PDF file, max. 5 MB: packed PDF documents, archive files like zip, rar etc. Word documents cannot be processed and therefore cannot be considered!) with the usual documents, in particular CV, proof of qualification and certificates, stating the **reference number 53-2025 until 20th August 2025** to (see button e-mail application below).

If you have any questions, please do not hesitate to contact us: **Dr. Amit Kumar Srivastava**, **Tel. +49 (0) 33432/82-173**.

For cost reasons, application documents or extensive publications can only be returned if an adequately stamped envelope is attached.

If you apply, we collect and process your personal data in accordance with Articles 5 and 6 of the EU GDPR only for the processing of your application and for purposes that result from possible future employment with the ZALF. Your data will be deleted after six months.

Bewerbungsschluss: 20.08.2025

Stellenanbieter: Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF) e.V.

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Online-Bewerbung:

 $\frac{\text{https://jobs.zalf.de/en/jobposting/29fe40e9b08176e864590d1670b2b0305db6a60a0/apply?ref}{=GJ}$

Sonstiges: reference number 53-2025

Ursprünglich veröffentlicht: 07.08.2025

greenjobs.de-Adresse dieses Stellenangebots: https://www.greenjobs.de/a100147002