

Research Scholar for nature-based climate solutions research project

The Agriculture, Forestry, and Ecosystem Services (AFE) Research Group, within the IIASA Biodiversity and Natural Resources (BNR) Program is looking for a highly motivated remote sensing specialist to work closely with project partners in the development of scalable open-source landscape monitoring technology that can address multiple thematic requirements of diverse NCS actors and stakeholders.

BACKGROUND

The AFE Research Group strives to generate knowledge and develop state-of-the-art modeling tools with the objective of advancing the scientific community and supporting policy stakeholders in their effort to better understand and manage global and regional land systems.

THE PROJECT

Funded by the International Climate Initiative, AFE is coordinating the four-year impact-oriented research project *Evolving Participatory Information System* (EPISTEM) for Nature-based Solutions.

EPISTEM aims to provide and mainstream open-source technology that could provide actors of nature-based climate solutions (NCS) with access to high-quality Land Use and Land Cover (LULC) data. Focusing on Indonesia and broader Southeast Asia, the EPISTEM initiative will support the region's NCS aspirations through data empowerment that could unlock technical barriers for activities across the NCS delivery chain.

MAIN TASKS AND RESPONSIBILITIES

- Collaborate with remote sensing experts and NCS specialists in Indonesia to design, develop, and optimize an
 open-source, automated LULC mapping technology tailored to Southeast Asia's ecological and geographical
 contexts.
- Conduct testing, validation, and ensure the accuracy and reliability of the LULC mapping technology, incorporating local knowledge and expertise.
- Collaborate with remote sensing experts and NCS specialists in Indonesia to develop an open repository for participatory LULC reference data generation.
- Develop a robust LULC key interpretation algorithm to ensure the production of high-quality, accurate LULC

maps from satellite imagery.

- Design and coordinate mapathon activities, engaging local stakeholders and citizen scientists in generating high-quality LULC reference data.
- Contribute to the creation of user-friendly documentation, tutorials, and guidelines for the LULC mapping tools and processes.

REQUIREMENTS

- PhD or Master's degree (or equivalent) in remote sensing, applied ecology, or a related field, with extensive experience in remote sensing data processing.
- Proven expertise in geospatial processing and satellite image interpretation using Google Earth Engine or similar cloud-based platforms.
- In-depth knowledge of satellite imagery sources and their applicability for land use/cover mapping in tropical regions, particularly in Indonesia.
- Strong understanding of satellite image calibration, correction, and processing techniques.
- Experience in developing applications that integrate geospatial processing results with web-based tools, databases, or user interfaces.
- Demonstrated experience in research related to the land use sector in Indonesia or Southeast Asia.
- Excellent organizational skills with demonstrated capability to work independently and respond to deadlines in a timely manner.
- Fluency in English (both written and spoken) is required; proficiency in Bahasa Indonesia is advantageous.
- Strong interpersonal skills and a willingness to work in a diverse, collaborative environment.
- IIASA offers an interdisciplinary and international workplace, and the possibility to interact with researchers of different nationalities, with strong ties to a world-wide network of research institutions engaged in environmental systems research. The successful candidate must be able to work in, and have respect for, an intercultural environment, and IIASA core values.

WE OFFER

- The possibility to contribute to environmental sciences for sustainability and global wellbeing.
- Career development perspectives.
- An international atmosphere and pleasant working environment in a historic market town surrounded by green areas.
- An attractive salary which is exempt from income tax in Austria and negotiable, based on the qualifications, skills and experience of the selected individual but at least EUR 53,451.00.
- Salaries quoted are:
 - Gross per annum (subject to deductions for health insurance and/or social security).
 - Not directly comparable with other employers in Austria, due to the unique legal status and privileges granted to IIASA.
 - Subject to the principle of income aggregation (Progressionsvorbehalt in German).

OTHER BENEFITS

- Educational subsidies for children of school age enrolled in private schools in Austria.
- A generous five weeks of annual leave plus additional institute days off.
- Relocation allowances and paid home leave.
- The possibility to work up to 100 days per year in home office (within Austria).
- Assistance for newcomers to Austria with visa, work and residency permit applications.
- Support finding accommodation in Austria.

Further details here.

APPOINTMENT TERMS

The selected candidate should be available to take up

the position by August 2025 (start date negotiable). We offer an initial fixed-term, two-year, full-time (40 hours per week) employment contract, with the possibility of extension thereafter. Eligible applicants wishing to work part-time hours may be considered.

The place of work is at the IIASA premises in Laxenburg, near Vienna in Austria.

The successful candidate will be appointed as a research scholar (R2) in accordance with the IIASA profiles for research careers.

About IIASA

IIASA is committed to a working environment that promotes equality, diversity, tolerance and inclusion within its workforce. This is reflected in our <u>IIASA core values</u> and the <u>IIASA Gender Equality Plan (GEP)</u>. We encourage qualified candidates from all religious, ethnic, and social backgrounds to apply. In the case that candidates are equally qualified, preference will be given to applicants from countries where IIASA has a <u>Member Organization</u>.

Further Information

For further information about this opportunity please contact

Ping Yowargana AFE Senior Research Scholar

For general information about working at IIASA, contact: recruitment@iiasa.ac.at

Applications

We invite you to submit your application in English by clicking on the apply button.

Please include

- A cover letter outlining your motivation and fit to the position.
- Your CV.
- The contact details of two reference givers.

Deadline for receipt of applications: extended to 31 May 2025

