

The logo for the Indian Institute for Human Settlements (IIHS), featuring the lowercase letters 'iihs' in a white, sans-serif font on a dark red rectangular background.

INDIAN INSTITUTE FOR  
HUMAN SETTLEMENTS

**The IIHS Post-Doctoral Programme**

# A Call for Fellows

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Post-Doctoral Fellow / Senior Research Associate in Machine  
Learning and Computer Vision

## **The IIHS Post-Doctoral Programme**

IIHS seeks Post-Doctoral Fellows or Senior Research Associates to join its vibrant intellectual environment within the Academics and Research programme. IIHS is increasingly recognized in India and internationally as a significant node in urban research and practice on the global South. Its promotion of inter-disciplinary pedagogy, on-the-ground learning, an excellent library on various aspects of the urban, and a convivial place for research make it an ideal location for scholarship.

Post-Doctoral Fellows / Senior Research Associates at IIHS typically have one or two-year terms, and some may be extendable. While Fellows are hired institutionally at IIHS, each is hired into a specific and on-going research-based project, which will be the Fellow's first home within IIHS.

Project-related research will account for up to half of the Fellow's time, though this can vary for different projects. The remaining time is equally split between the Fellow's own research and writing as well as their participation in IIHS institutional roles. These roles include: teaching in on-going academic or capacity building programmes, participating in the internal conference and seminar series, and supporting institutional processes.

This call is associated with the PEAK (Prediction and projection, Emergent urbanism, Adopted knowledge, Knowledge exchange) consortium, funded by the Global Challenges Research Fund (GCRF), UK.

### **About the PEAK project**

Led by the University of Oxford, and in partnership with IIHS, Peking University and the University of Cape Town, the PEAK consortium has identified four overarching themes of urban dynamics – Prediction, Emergence, Adoption and Knowledge. Researchers will work across natural sciences (including mathematics, medicine, transport and engineering), the social sciences (including anthropology, development, migration) and humanities (including law, history). The PEAK framework synthesises traditional urban studies disciplines with emergent new urban sciences in a programme of research and capacity building across the humanities, social sciences and natural sciences. PEAK is grounded in the logic of urban complexity to develop an array of disciplinary perspectives that will address the challenges of the 21st century city. More details on the PEAK consortium are available here:

<http://gtr.rcuk.ac.uk/projects?ref=ES/P011055/1>

The focus of the PEAK project is particularly on developing a new cohort of interdisciplinary urban researchers, and therefore offers multiple opportunities for young scholars to develop research, teaching, and writing skills. Opportunities exist for individual scholarship, collaborative work with scholars at partner institutions including the University of Oxford and the University of Cape Town, as well as potential travel to partner institutions through summer schools and internships.

### **Research Fellowship in Machine Learning and Computer Vision**

This call invites applications for a Post-Doctoral Fellow / Senior Research Associate in the areas of machine learning and computer vision. Applicants are expected to have an interest in both areas of research, with advanced qualifications and expertise in at least one. Selected

candidates will be encouraged to conduct research that focuses on applying methods from these domains to urban spatial datasets, especially satellite imagery.

The Fellow / Senior Research Associate will also be expected to develop innovative analysis methods that integrate multiple kinds of urban datasets. For instance, deeper insights can be generated by integrating satellite imagery, census data, data from administrative and planning agencies and primary survey data, than what any of these datasets can individually provide. The fellowship / research position also provides the opportunity to explore new methods of data collection.

The Fellow / Senior Research Associate will be encouraged to disseminate research findings through multiple channels including journal articles. In addition, s/he will also have the opportunity to work with other teams at IIHS to translate new analysis methods into software tools and develop training modules for such tools to ensure that these analysis methods are more accessible to practitioners.

Through these research and knowledge dissemination processes, fellows/senior research associates are expected to develop new ways of understanding Indian cities and assist policy makers and practitioners in addressing urban problems with deeper insights.

### **Fieldwork**

This position is based in Bengaluru. This is a one-year position, extendable.

### **Qualifications**

Applicants should hold a PhD in Computer Science, Mathematics or related areas. A proven research and publication record with at least one publication in a noted peer-reviewed academic journal is required. Candidates with Master's degree may also apply provided they have an excellent publication record and/or relevant work experience.

### **Diversity Policy**

IIHS is an equal opportunity employer that encourages women, people with disabilities and those from economically and socially excluded communities with the requisite skills and qualifications to apply for positions.

### **To apply**

If you are interested to explore this opportunity with us, please fill the online application form by clicking [here](#) (You can also click on the "Apply Now" button at the end of the Job Description displayed on the website).

### **Contact**

Please write to us at [hr@iihs.co.in](mailto:hr@iihs.co.in) if you need any clarifications while filling the online application form.

### **Note**

All offers are on an exclusive basis, which implies that other professional assignments (whether compensated or not) that bear a potential conflict of interest with IIHS cannot be undertaken.



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