



Birla Institute of Technology & Science, Pilani

Hyderabad Campus

CALL FOR Junior Research Fellow (JRF) – AI for Climate, Health & Sustainability

BREATHE Project (British Academy Funded)

The Department of Computer Science & Information Systems at BITS Pilani, Hyderabad Campus invites applications for a Junior Research Fellow (JRF) to work on the BREATHE (Building Resilience through Equitable Action on Temperature, Heat, and Indoor Emissions) project, an interdisciplinary research initiative funded by the British Academy (UK).

The project is a collaboration between BITS Pilani, the University of Warwick (UK), and the One Health Trust (India), and aims to develop AI-driven solutions for understanding how heat stress, indoor air pollution, climate vulnerability, and socio-economic inequalities affect peri-urban and climate-vulnerable communities in India.

The selected candidate will join the SUST.AIN Lab at BITS Pilani and contribute to the development of next-generation AI-based climate-health intelligence systems using multimodal data from environmental sensors, wearable devices, satellite imagery, and socio-economic surveys.

Research Areas - The project involves research at the intersection of:

- Artificial Intelligence and Machine Learning
- Climate and Environmental Data Analytics
- Digital Health and Physiological Sensing
- Geospatial AI and Remote Sensing
- Multimodal Data Fusion
- Time-Series Analysis
- Explainable and Trustworthy AI

Key Responsibilities - The selected candidate will:

- Design and develop AI/ML models for climate-health analytics.
- Analyse multimodal datasets including wearable physiological signals, environmental sensing data, satellite imagery, and household survey data.
- Process geospatial and remote sensing datasets (e.g., Sentinel, Landsat, ERA5).
- Develop climate vulnerability maps and AI-driven visual analytics.
- Collaborate with interdisciplinary teams across partner institutions.
- Contribute to research publications, technical reports, and conference presentations.



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Eligibility - Applicants should possess:

- B.Tech./B.E., M.Tech./M.E., or M.Sc. in one of the following disciplines:
 - Computer Science
 - Artificial Intelligence / Machine Learning
 - Data Science
 - Electrical or Electronics Engineering
 - Geoinformatics / GIS
 - Biomedical Engineering
 - Environmental Data Science
 - Signal Processing
 - or related disciplines.

Candidates with strong academic records, prior research experience, or qualifications such as GATE/NET (where applicable) are encouraged to apply.

Desired Skills - Applicants with experience in one or more of the following areas will be preferred:

- Python programming
- Machine Learning and Deep Learning
- PyTorch, TensorFlow or Scikit-learn
- Time-series analysis
- GIS and Remote Sensing
- Google Earth Engine, QGIS or ArcGIS
- Environmental or physiological sensing
- Data visualization and analytics

Prior research experience, publications, or open-source contributions will be an added advantage.

Fellowship & Duration

- ₹37,000 per month + HRA (as per DST/British Academy project norms)
- Initial appointment for one year, extendable up to 24 months based on satisfactory performance and project requirements.



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Why Join?

This position offers an excellent opportunity to:

- Work on an internationally funded interdisciplinary research project addressing climate resilience and public health.
- Develop expertise in AI, digital health, remote sensing, wearable sensing, and geospatial analytics.
- Work with unique multimodal datasets collected from real-world communities.
- Collaborate with researchers from BITS Pilani, University of Warwick, and One Health Trust.
- Publish in leading AI, health, and environmental science conferences and journals.
- Explore opportunities for pursuing a PhD at BITS Pilani, subject to institute regulations and performance.

How to Apply - Interested candidates should submit their application through the following Google Form:

Application Form - <https://forms.gle/t4hHbNXXs7a74RJ9>

Applicants will be required to upload the following documents:

- Updated CV
- Statement of Interest (maximum 500 words)
- Degree certificates and academic transcripts
- GATE/NET scorecard (if applicable)

Application Deadline - 15 August 2026 (11:59 PM IST)

Selection Process - Applications will be screened based on academic background, relevant skills, and research experience. Only shortlisted candidates will be invited for an online/offline interview. The final selection will be based on the candidate's academic credentials, technical expertise, research aptitude, and interview performance.

Contact

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CALL FOR POSTDOCTORAL RESEARCH FELLOW FOR A RESEARCH PROJECT

Date: 23.7.2026

Applications are invited from suitable candidates for the position of **Postdoctoral Research Fellow** to work on the following project sponsored by the **British Academy**, under the supervision of Prof. Lavanya Suresh, Department of Humanities and Social Sciences and Prof. Manik Gupta, Computer Science & Information Systems Birla Institute of Technology and Science (BITS), Pilani, Hyderabad Campus.

The project is a collaboration between Warwick University, UK, Birla Institute of Technology and Science (BITS), Pilani, Hyderabad Campus and OHT.

Title of the Project: Building Resilience through Equitable Action on Temperature, Heat, and Indoor Emissions (BREATHE)

Description of the Project:

BREATHE investigates how historical and intersectional inequalities influence differential experiences of heat stress and indoor air pollution (IAP) among members of peri-urban households within the global south. We hypothesize that women and vulnerable members of traditionally patriarchal households are likely to experience intensified effects of heat stress and IAP than their male counterparts. This inequality in lived experiences, we argue, is due to intersections between patriarchal norms that transform households into secondary gendered spaces of production, perpetuation of colonial architectural ideals, and usage of unclean cooking fuels within these homes. Interdisciplinary BREATHE investigates this intersection for the very first time by combining historical research with large household surveys, satellite data analysis and machine learning models in two heat stressed, peri-urban regions of south Indian Karnataka (Bidar, Chikkaballapur districts). Working with different stakeholders in these regions, BREATHE will both facilitate and autoethnographically analyze processes and barriers to co-creating equitable climate futures

Duration of the Project: Till 26 April 2028

Project Position and Number: Postdoctoral Research Fellow – 1 (India-based)

Fellowship Amount: Around Rs. 1,00,000/-

Location: BITS Pilani, Hyderabad Campus



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Eligibility Requirements

Essential:

- PhD (completed or near completion) in Political Science, Development Studies, Environmental Studies, Human Geography, or a closely related field
- Should be within 5 years of completion of PhD
- Demonstrated research experience in areas such as climate change, political ecology, environmental governance, air pollution, heat, or urban/peri-urban studies
- Strong qualitative research skills (including fieldwork, interviews, ethnography, and case-based analysis)
- Ability to coordinate and manage research projects/activities across multiple institutions and countries
- At least two publications in reputed peer reviewed journals in relevant thematic areas (climate change, environment, development, energy, or related fields)

Desirable:

- Prior experience working in peri-urban or rural Indian contexts
- Familiarity with gender analysis or feminist approaches
- Experience with interdisciplinary or mixed-methods research
- Ability to translate research findings into policy-relevant outputs
- Experience in project coordination or management
- Working knowledge of Kannada or other relevant regional languages (preferred but not mandatory)

Role and Responsibilities

- Conduct field-based research in peri-urban Karnataka (Bidar and Chikkaballapur)
- Lead and coordinate project activities across collaborating institutions in India and the UK
- Manage timelines, deliverables, and research workflows across the two-country (UK and India) project
- Contribute to research design, data analysis, and academic publications
- Support stakeholder engagement, including with communities and policymakers
- Assist in organizing workshops, dissemination events, and project reporting

Interested candidates with the above-mentioned qualifications can submit their applications on this [google form linked below](#) giving detailed information about educational qualifications, research experience, and published research papers, by **15th Aug, 2026**.



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Apply here: <https://forms.gle/YCqg98CjkAbUzufp8>

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Please note no TA/DA will be paid for attending the interview.



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