



**Junior / Senior Research Fellow Vacancy
National Institute of Advanced Studies
IISc Campus, Bengaluru**

National Institute of Advanced Studies (NIAS) was conceived and founded in 1988 by the late Mr. J. R. D. Tata, who sought to create an institution to conduct advanced multidisciplinary research. Housed in a picturesque green campus in Bangalore the Institute serves as a forum to bring together individuals from diverse intellectual backgrounds, in the natural and life sciences, humanities, social sciences, and conflict and security studies. The philosophy underlying NIAS is given shape by its multidisciplinary research teams. The Institute is unique in its integrated approach to the study of intersections between science and technology, philosophy, social issues and leadership. The objective is to nurture a broad base of scholars, managers and leaders who would respond to the complex challenges that face contemporary India and global society, with insight, sensitivity, confidence and dedication. For more details: www.nias.res.in

NIAS invites applications from eligible candidates for a position of Junior/Senior Research Fellow to work in a project, described below.

About the Project: The Project deals with study of techniques to investigate issues such as ethics, trust and fairness of machine learning algorithms in Artificial Intelligence, drawing inspiration from disciplines such as social science and philosophy. A comparative study of various techniques has to be carried out through simulation and analysis, before proposing new algorithms. All these issues need to be linked to Machine Consciousness as the key component.

Job description: The candidate is expected to carry out a detailed literature survey on the techniques/ algorithms for studying ethics, trust and fairness of machine learning applications with Machine Consciousness as the main link, and implement the techniques for a chosen application to evaluate their performance, and develop improved techniques.

Minimum Qualifications: i. First Class or equivalent undergraduate degree in Engineering with specialization in Computer Science/Information Technology or Science/Electronics and Communication/Electrical and Electronics Engineering with valid GATE Qualification. OR First Class or equivalent Master's degree in Social Science or Philosophy with valid NET Qualification OR First Class or equivalent MSc degree in Computer Science or MCA, with valid NET/GATE Qualification as applicable

ii. Research experiences: The candidate should have some basic background in Machine Learning algorithms or a flair for learning the topic fast; other than proficiency in programming. Such details should be clearly highlighted in the application, with demonstrated evidence if any. Strong interest in interdisciplinary nature of work cutting across disciplines such as machine learning, social science and philosophy is desirable. Proficiency in computer programming is essential.

iii. Candidate with a minimum of two years of relevant research work experience will be considered for the level of SRF.

Fellowship: Junior Research Fellow: Rs.25,000/- per month, plus House Rent Allowance as per the norms of the Institute, which is currently 24% of the Fellowship. Senior Research Fellow: Rs.28,000/- per month, plus House Rent Allowance as per the norms of the Institute, which is currently 24% of the fellowship.

Mode of Application: Interested applicants should submit their curriculum vitae electronically stating clearly about GATE/NET Qualification with proof, along with the following documents (as a single pdf document):- 1. Covering letter 2. Statement of Purpose 3. Copy of degree certificates.

The last date for receiving applications is 25 October 2021. Short-listed candidates will be invited to NIAS for an interview (physical/virtual to be decided later).

The applications should be addressed to:

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