



# Indian Institute of Technology Indore

Simrol Campus: Khandwa Road, Simrol Indore 453552

Ref.: IITI/Maths/NSM/2021

Dated: 20.12.2021

## Advertisement for Research Associate (RA) position under NSM project

IIT Indore invites applications from highly motivated, sincere, hardworking and research-oriented candidates for the position of **Research Associate (RA)** in the National Supercomputing Mission (NSM) funded research project (DST/NSM/R&D\_HPC\_Applications/2021/03.29) entitled "Diagnosis of Alzheimer's disease using brain imaging data" of **Dr. M. Tanveer** (PI of the project). Candidates are advised to visit the profile of **Dr. M. Tanveer** (<http://iiti.ac.in/people/~mtanveer>).

### **Project Details:**

The project is aimed to develop novel shallow/deep learning techniques for the diagnosis of Alzheimer's disease. One of the primary objectives is to use standard feature extraction software to process neuroimaging data. Since the magnetic resonance imaging data is having many features, i.e. a million voxels and thus we need to utilize the national supercomputing facilities for the preprocessing of data. Another task of this project is to use efficient deep learning models for the classification and regression of brain imaging data. Deep learning networks such as convolutional neural networks have more than a million parameters. Therefore, we will deploy these networks on the high computation facilities. This will improve the research in the areas of Alzheimer's disease as well as shallow/deep learning. Moreover, we will use the high computation facility for comparison of our proposed techniques with various state of the art deep learning approaches.

**Salary:** Consolidated emoluments- INR 47000 per month + House Rent Allowance (as per DST norms)

**Tenure of the appointment:** Initially for one year, extendable for further period subject to satisfactory performance of the incumbent and continuation of the project.

**Essential Qualification:** Ph.D. degree (awarded or thesis submitted) in Computer Science/Electrical Engineering/Mathematics/or in equivalent streams with good Journal/Conference Publications.

**Desirable Qualification:** Candidates having high quality journal/conference papers in the areas of machine learning, deep learning and biomedical applications, knowledge of programming (MATLAB, R, Python) are encouraged to apply.

### **How to Apply:**

Interested candidates are requested to send a detailed CV with a complete list of publications latest by **December 30, 2021** to **Dr. M. Tanveer** ([mtanveer@iiti.ac.in](mailto:mtanveer@iiti.ac.in)) with the subject line "Application for Research Associate position". Complete information with respect to such as year of passing, experience, marks etc. should be mentioned in the CV. Incomplete applications will be rejected. Only shortlisted candidates will be intimated by email for an online interview in the first week of January 2022. No TA/DA will be paid for appearing in the interview.

Note: The Institute reserves the right to fill or not to fill the post advertised.