

**Indian Institute of Technology Indore**  
**Simrol Campus: Khandwa Road, Simrol Indore 453552**

Ref.: IITI/MATHS/CSIR/EMR-II/2017/22(0751)

Dated: 23.01.2020

**Advertisement for Research Associate (RA) position under CSIR sponsored project**

IIT Indore invites applications from highly motivated, sincere, hardworking and research-oriented candidates for the position of **Research Associate (RA)** in a CSIR funded research project entitled “Detection of human brain disorders using novel machine learning approaches”. Candidates are strongly advised to visit the profile of **Dr. M. Tanveer** (<http://iiti.ac.in/people/~mtanveer>) and **Dr. R.B. Pachori** (<http://iiti.ac.in/people/~pachori>), before applying against this advertisement. The research associate will be working under **Dr. M. Tanveer** (PI of the project) and **Dr. R.B. Pachori** (Co-PI of the project) at IIT Indore.

**Project Details:**

The early and accurate diagnosis of brain neurological disorder diseases like epilepsy, sleep disorders, Alzheimer’s etc. is a major public health problem. In this context, machine learning approaches are particularly promising in order to design systems that can accurately classify patients with epilepsy, sleep disorders, Alzheimer’s etc. and predict their evolution at the earliest stage. Machine learning approaches have been successfully applied to the individual classification of different neurological and psychiatric conditions such as epilepsy, sleep disorders, Alzheimer’s and Parkinsonian syndromes. The main objective of this project is to develop a new machine learning approach for analysis and classification of brain neurological disorder patients like epilepsy, sleep disorders, Alzheimer’s etc. The performance of the developed algorithm will be compared with the existing algorithms using several measures; classification accuracy, sensitivity, specificity, receiver operating characteristic and Matthews correlation coefficient etc.

**Stipend and duration:** The amount of fellowship will be as per CSIR norms. Initial appointment is for one year and co-terminus with the project. **Interested M.Tech. /M.S. /M.E. candidates will be encouraged to enroll for the PhD program at IIT Indore.**

**Qualifying Degree and Examination (Minimum Eligibility)**

*Essential Qualification:*

Ph.D. degree in Computer Science/Electrical Engineering/Mathematics/or in equivalent streams with good Journal/Conference Publications. **OR**

M.Tech. /M.E. or equivalent degree in Computer Science and Engineering/Electrical and Electronics Engineering/or in equivalent streams plus three years of research, teaching and design & development experience.

*Desirable Qualification:*

Candidates having exposure to machine learning, optimization, biomedical signal processing are encouraged to apply.

**How to Apply:**

Interested candidates are requested to send a detailed CV to **Dr. M. Tanveer** ([mtanveer@iiti.ac.in](mailto:mtanveer@iiti.ac.in)) or **Dr. R.B. Pachori** ([pachori@iiti.ac.in](mailto:pachori@iiti.ac.in)) with subject line “Application for Research Associate position” latest by February 08, 2020. 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 called for interview in the third week of February 2020. Selected candidates will be intimated by email. 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.