Indian Institute of Technology Indore

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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Dated: 03/07/2023

Advertisement for Junior Research Fellow (JRF) Position

Applications are invited from motivated and eligible candidates for the position of Junior Research Fellow (JRF) in a DST-funded Research Project titled "Towards polynomial-time algorithm(s) for the permanent of some classes of matrices". By definition, matrix determinant and permanent are two very similar quantities of a square matrix, but computationally they are extremely different. Matrix determinant is a polynomial-time solvable problem; that is, it is in class P. Whereas matrix permanent is a #P-complete problem. The question we will be mostly focusing on is to find some classes of matrices whose permanent can be expressed as the determinant of some polynomial-size matrix.

Eligibility: M.Tech/ B.Tech/MS (Research) degree in Computer Science or M.Sc/ MS in Mathematics with CSIR/UGC-NET or valid GATE score.

Desirable Qualification: The candidate should have a basic knowledge of theoretical computer science, graph theory, and linear algebra**.**

Stipend: Consolidated INR 31000 per month.

Duration: Initial appointment will be for one year, which is extendable up to 2 years solely based on performance.

The successful candidate can also be considered for admission to the Ph.D. program as a regular full-time scholar based on the eligibility criteria at IIT Indore.

How to Apply: Interested candidates are requested to submit a detailed CV to Dr. Ranveer Singh, Department of Computer Science and Engineering, Indian Institute of Technology Indore, via email: **ranveer@iiti.ac.in** with the subject line "Application for JRF position" latest by July 16, 2023. The CV should include details of academic grades starting from 12th standard onwards with details of the year of passing, institute/university/college, etc., and also work experience and nature of work if applicable. If a candidate has a GATE score, details such as year of passing, discipline, marks, all India rank should be mentioned in the CV. Incomplete applications will be rejected.

Only shortlisted candidates will be called for an interview. Selected candidates will be intimated by email for an interview.