Indian Institute of Technology Indore
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Advertisement for Junior Research Fellow (JRF) Position

 Applications are invited from motivated and eligible candidates for the Junior Research Fellow (JRF) position in a SERB-funded research project titled **"The construction of expanders and Ramanujan graphs and their application in robust network topologies**." Expanders are families of graphs that are both sparse and well-connected. The Cheeger constant (or expansion ratio) of graphs determines how better expander the family of graphs is. It turns out that there cannot be better expanders than Ramanujan graphs; they are optimal expanders. Ramanujan graphs have many applications in mathematics and computer science; however, their construction is quite nontrivial. The project will focus on their construction towards constructing fast and robust network topologies.

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: 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 October 25, 2022. The CV should include details of academic grades starting from 10th 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.