

Neeldhara Misra, Ph.D.
Assistant Professor
Computer Science and Engineering
Academic Building 4/305
Indian Institute of Technology Gandhinagar Palaj
382355, Gujarat, India
Website: <http://people.iitgn.ac.in/~neeldhara>
Ph: (Office) +91 79 2395 2490



Postdoctoral Fellowship in Parameterized and Exact Algorithms

Applications are invited for a Postdoctoral Fellowship funded by Indian Institute of Technology Gandhinagar (IITGN).

Job description: The postdoctoral fellow will work on problems that arise in algorithmic graph theory, especially in the context of information cascades on networks. In particular, we are interested in problems such as firefighting, target set selection, and opinion diffusion. For the computationally hard problems relevant to practice, we expect to employ the toolkit of parameterized and exact algorithms, and will often rely on exploiting structure in the input. We will also address game-theoretic aspects of opinion diffusion, including the complexity of problems like bribery and manipulation on a network to engineer a specific outcome.

Eligibility: A Ph.D. with a background in Computer Science and Engineering, Mathematics or related field, with a good publication record. Candidates who have submitted their thesis are also eligible.

Applicants are expected to have a strong background in: a) graph theory and graph algorithms, b) data structures and algorithms, and c) oral and written communication. Familiarity with programming and advanced algorithmic techniques pertinent to coping with NP-hardness is desirable but not required.

Duration: The initial appointment will be for one year, extendable for up to 2 years based on performance.

Remuneration: INR 45,000 to 55,000 per month as per institute norms, based on experience and qualifications.

Application procedure: All queries related to this position should be directed to Prof. Neeldhara Misra (neeldhara.m@iitgn.ac.in). To apply, candidates should send the following documents as a single PDF file attachment to Prof. Neeldhara Misra on or before 26th August 2019:

- 1) Curriculum Vitae with details of academic record and previous publications,
- 2) cover letter indicating date of availability for starting and the reasons for being interested this position,
- 3) description (300-words) of previous research contributions and future career goals, and
- 4) Contact details of three references.