

## **Advertisement for the post of Research Assistant under DST INSPIRE project at IITD.**

Applications are invited from **highly motivated** and bright candidates for the position of Research Assistant in the following research project funded by DST INSPIRE, Government of India, under the supervision of Dr. Arnab Bhattacharjee, Principal Investigator, IITD. Selected candidates will have the opportunity to get registration for PhD in **Computer Biology** during the tenure of the project subjected to meet the IITD criteria. Only shortlisted candidates will be communicated to appear in the interview and no other communications in this regard will be entertained.

**Title of the Research Project:** Understanding the role of DNA flexibility in protein-DNA recognition.

**Description of the Project:** Many genetic processes such as, repression, transcription, replication and repair of damaged DNA, are carried out by DNA binding proteins (DBPS) that rapidly (rate ranges from  $\sim 10^2 \text{ nm}^2 \text{ s}^{-1}$  to  $\sim 10^5 \text{ nm}^2 \text{ s}^{-1}$ , which is faster than typical 3D diffusion rate) and specifically recognize short DNA target sequences in an enormous genomic background. While important, understanding the structural and molecular mechanism of protein-DNA recognition is a daunting task mainly because of the elusive and transient nature of the nonspecific interactions between these biomolecules. We plan to investigate many intricate details of such complex process by developing models with various levels of complexity and using different biomolecular simulation techniques.

**Name of the position available:** Research Assistant

**Number of positions available:** One

**Essential qualifications:**

- MSc in Physics/Chemistry/Mathematics with at least 70% marks in both B.Sc and M.Sc.
- BTech / BE / MTech / MS / ME in CS / IT / ECE / EE CGPA at least 7.5 on a scale of 10 (or equivalent). If your institute does not provide CGPA in the transcript, then at least 70% marks is required to be eligible.
- MCA/MSc(CS/IT/ECE/EE and allied areas) degree is considered equivalent to the BTech/BE degree. Such students are also eligible to apply with the condition that they have BSc in Computer Science or BSc in any other subject with Mathematics as one of the courses. The marks requirement is same as that given above for BTech/BE degrees.

Requirements may be relaxed for exceptional candidates with publications/ R&D/software development.

**Desirable qualifications:**

- Programming knowledge in C and/or Fortran 90.
- Valid Net/GATE score.

**Salary:** As per IIITD rule.

**Last date for application:** The last date for application submission by email is 30/09/2014. Interested candidate should submit curriculum vitae to [arnab@iiitd.ac.in](mailto:arnab@iiitd.ac.in) by clearly mentioning the subject “**Application for Project Assistant in Comp-Bio**”