08.04.2021

Recruitment of Junior Research Fellow in the Department of Computer Science and Engineering

Applications are invited for the post of Junior Research Fellow to work in a project titled "**Developing Improved Algorithms for Intelligent Video Surveillance**" sponsored by the Science & Engineering Research Board (SERB), Government of India for three years.

Objectives of the Project:

- Developing automated end-to-end neural network models for accurate tracking of multiple persons in video frames in the presence of fixed or dynamic background, occlusion, and/or persons with similar appearances.
- Developing learning-based algorithms for real-time face and silhouette de-identification without losing information about the activities performed by each subject in a multi-person environment.
- Proposing efficient algorithms for detecting suspicious activities and behavioral anomalies in a crowd with less false alarm rate.
- Carrying our extensive evaluation, and comparative analysis with state-of-the-art techniques.

Details of the Position:

1. **Name of the Position**: Junior Research Fellow (JRF)
2. **Number of Positions**: 01
3. **Last Date of Application**: 30 days from the date of advertisement
4. **Tenure**: Three years (initial appointment will be for one year, which may be extended based on performance)
5. **Emoluments (p.m.)**: INR 31,000/-
6. **Qualifications**: Either MTech in CSE/IT/ECE/Mathematical Sciences (or, in an allied discipline) with minimum 60% marks or 6.0 CPI (on a 10 point scale) (*preferable*), or BTech in CSE/IT/ECE/Mathematical Sciences (or, in an allied discipline) with minimum 75% marks or 7.5 CPI (on a 10 point scale) along with GATE/NET in an allied Engineering discipline.
7. **Desirable Skillsets/Experiences**:
   - Experience of implementing Computer Vision and Machine Learning algorithms such as video object tracking, object segmentation, image segmentation, object tracking, multi-object tracking
   - Knowledge of OpenCV, Deep Learning frameworks (preferable)
   - Good communication skills in English
   - The candidate should be well conversant with the available open-source development frameworks and should have the intent to carry out high quality research work and earn a Ph.D. degree out of this work
8. **Upper Age Limit**: 28 years. Age relaxation applicable as per Government of India (GoI) norms

Application Procedure:
Make a single PDF file (application form along with self-attested copies of all relevant qualification certificates, mark-sheets, experience certificates, age-proof, and other relevant documents in order), and email it to *pratik.cse@iitbhu.ac.in* with subject line *Application for JRF-2021*. There is no need to send hard copies of the documents separately. However, candidates need to show the original documents at the time of interview/joining for verification.

General Terms and Conditions: (i) The PI has the discretion to restrict the number of candidates to be called for interview to a reasonable limit by qualifications and experience higher than the minimum prescribed in the advertisement. (ii) Only shortlisted candidates will be communicated through email to appear for the interview. (iii) No TA/DA will be paid for attending the interview. (iv) The position is purely temporary and is coterminous with the project. (v) The selected candidate can be considered for Ph.D. program after fulfilling the required criteria of IIT-BHU. (iv) Please refer to the institute website: www.iitbhu.ac.in/positions_available for further details and updates, if any.

Contact Details:
Dr. Pratik Chattopadhyay (Assistant Professor)
Pattern Recognition Laboratory, Department of Computer Science and Engineering,
Indian Institute of Technology (BHU) Varanasi 221005, U.P., India.
Email ID: pratik.cse@iitbhu.ac.in

भारतीय प्रौद्योगिकी संस्थान(का.हि.वि.) वाराणसी – 221005 भारत
Indian Institute of Technology(BHU) Varanasi-221005 India
Tel. No. : 2700 (Intercom) Fax No. : 0542-2368428 Email: head.cse@iitbhu.ac.in
Web: iitbhu.ac.in

APPLICATION FOR JRF POSITION

1. Full Name:

PHOTO

2. Date of Birth:

3. Sex: M/F   4. Category: GEN/SC/ST/OBC/EW

5. Marital Status:

6. Nationality: 7. Physically handicapped: Y / N

8. Names of Father and Mother:

9. Address of Correspondence (including phone No):

10. E-mail Address:

11. Academic Record: (a) GATE/CSIR/UGC or equivalent National Exam Qualification details with Percent marks/Rank, year of qualifying etc:

(b) Qualifying Degree (starting from M.Tech or equivalent):

Qualification	University/Institute/Board	Year of passing	Subjects	Percentage/CGPA	Division
M.Tech					
B.Tech/B.E					
12th					
10th					
Others					

12. Details of Professional/ Work Experience:

Organization	Designation	Date-From	Date-To

13. Attach list of publications with clear mention of 2019 impact factor (if any).

14. Names and addresses of two referees along with phone number and e-mail address:

Declaration: I hereby declare that I have carefully read and understood the instructions and particulars on this application and that all entries in this form as well as in the attached sheets are true to the best of my knowledge and belief.

Date: Signature   Place:

Application Instructions

- Original certificates and self-attested copies of all certificates must be presented during the interview for verification.
- For further clarification, the candidate can discuss with the PI (Dr. Pratik Chattopadhyay) via email (pratik.cse@iitbhu.ac.in).
- The application should be according to the attached format. Incomplete application, in any form, will be rejected.
- Only shortlisted candidates will be intimated by email.
- No TA/DA will be paid for attending the interview.
- It is expected that the candidate will not leave in middle of the project.
- Make a single PDF file (Application form along with self-attested all relevant qualification certificates, mark-sheets, experience certificate, age proof, and any other documents in order) and email it to pratik.cse@iitbhu.ac.in with subject line Application for JRF-2021.
- Please refer to the institute website: www.iitbhu.ac.in/positions_available for further details and updates, if any.