



Indian Institute of Technology Jodhpur

Office of Research and Development

Advt. No.: IITJ/R&D/2021-22/45

21 December 2021

Project Recruitment

Applications are invited from the citizen of India for filling up the following temporary position in the Sponsored Research Project at this Institute. The position is purely temporary, initially for a period of 05 Months, and extendable but co-terminus with the duration of the project, on contractual basis with consolidated pay. The requisite qualification, experience and others details are given below:

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| 1. | Project No. | S/SERB/AJ/20200067 |
| 2. | Project Title | Secure and Robust Coordination and Control of Autonomous Multi-Vehicle Systems with Desired Constraints |
| 3. | Name of the Project Investigator | Dr. Anoop Jain |
| 4. | Duration for initial appointment | 05 Months |
| 5. | Name of the Post | Junior Research Fellow |
| 6. | Post | 01 |
| 7. | Consolidate Pay | 31,000/- +HRA (As per institute norms) |
| 8. | Minimum Qualification and Experience | <p><u>Eligibility:</u> B.E./B.Tech/M.E./M.Tech. with specialization in Electrical Engineering/Electronics Engineering/Mechanical Engineering/Aerospace Engineering or equivalent with First class or equivalent. GATE qualification in relevant Disciplines is mandatory for candidates from Non-CFTI institutes.</p> <p><u>Desirable Qualification:</u> Sound knowledge of fundamentals of control theory and Dynamical systems. Proficiency in MATLAB simulations, and prior hands-on experience with real Robotic systems are preferable. The candidate is expected to have good communication skills and ability to Cooperate within a team.</p> |
| 09. | Job Description | The selected candidate is expected to perform MATLAB simulations, help in the experimental set-up, perform experiments on real robotic swarm, and other Tasks for the successful completion of the project. |
| 10. | Brief description of Project | This project focuses on the following three main aspects in the <i>multi-agent networked systems</i> : i) Design of distributed control algorithms with desired physical and operating constraints. |

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| | | ii) Incorporation of issues related to cyber-security and robustness against malicious attacks iii) Multi-robot validation and experimentation in a laboratory on both ground and aerial vehicles. Note that the implementation of proposed control algorithms on real robotic swarm in a laboratory environment is One of the desirable activities in this project. |
| 11. | Maximum Age | Below 35 Years |

The candidates possessing the requisite qualification and experience should apply through the ONLINE process up to **28 December 2021**. The candidates are advised to send a soft copy of the application with all relevant documents to recruitment_rnd@iitj.ac.in (*Please mention the advertisement number in the subject line of the email*). *No need to send a hard copy.*

General Instructions to Applicant(s)

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| 1. | The post(s) is purely temporary and contractual for a period of 05 Months, and extension based on satisfactory performance, but co-terminus with the duration of the project |
| 2. | Application which is incomplete, not in prescribed format, without photograph or unsigned will be summarily rejected. |
| 3. | Certificate in support of experience should be in proper format i.e. it should be on the organizations letter head, bear the date of issue, specific period of work, name and designation of the issuing authority along with his signature. |
| 4. | Institute reserves the right to: a. Fix, modify or revise the eligibility conditions, age and selection criteria as per its requirements, at any time. b. Fill up the post, not to fill up the post or cancel the advertisement in whole or partly without assigning any reason. c. Place a reasonable limit on the total number of candidates to be called for the Written Test and/or Skill Test, Interview. |
| 5. | The Institute shall verify the antecedents or documents submitted by a candidate at the time of appointment or during the tenure of the service. In case, it is detected that the documents submitted by the candidates are fake or the candidate has a clandestine antecedents/background and has suppressed the said information, then his/her services shall be terminated. |
| 6. | Higher initial pay may be given to exceptionally qualified/deserving candidate. |
| 7. | No TA/DA shall be paid to the candidates for attending the interview. |
| 8. | No correspondence will be entertained from candidates regarding interview and reasons for not being called for interview. |
| 9. | Canvassing in any form will be a disqualification. |
| 10. | No interim correspondence will be entertained. |
| 11. | No need to send hard copy. |

Officer In-charge
Research & Development