



IIT Dharwad is an Institute of National Importance created by an Act of Parliament in 2016. IIT Dharwad has been steadily establishing its operations in its present campus while at the same time, master plan development and construction of permanent campus infrastructure are also in progress. The Institute is employing bright young and accomplished faculty and staff members. To cater the Institute's temporary requirement under a project in the Department of Electrical Engineering & Computer Science and Engineering; IIT Dharwad intends to hold an Online Selection Process for the following temporary position:

S. No.	Particulars	Details
1.	Name of the Position	Junior Research Fellow
2.	Number of Positions	02
3.	Essential Qualification	B. Tech with GATE score or M. Tech degree in Electrical Engineering or Computer Science and Engineering (or allied stream). [As per guidelines issued by Department of Science and Technology vide OM no. SR/S9/Z-05/2019 dated 21 August 2019]
4.	Desirable qualification	A strong interest and aptitude for Power Systems, Smart Grid, Cyber Security with emphasis on machine learning applications in detection of cyber-attacks in Smart Grid. or Strong aptitude for Data Structure and Algorithms, Computer networks and programming with a hands-on experience in C/C++/ Python. Should have hands on exposure to working in the Linux environment. The candidate should also have development experience in Machine Learning and Deep Learning.
5.	Consolidated Emoluments	Rs. 31,000 per month + 16% House Rent Allowance
6.	Duration of the project	Max 12 Months
7.	Tenure of appointment	The appointment for the above contractual position will be for one year subject to satisfactory performance and availability of funds.
8.	Age Limit	Not exceeding 35 years as on the date of selection process.

Job Description:

S. No.	Project Code and Title	Job Description
1	EE/PB/CPRI/2022/8.85 Cyber Physical Modelling and Detection of Cyber Attacks in a WADC in Smart Grid	For EE Background Candidates: 1. Modelling False Data Injection cyber-attack in wide area damping control that can destabilize the grid

		<ol style="list-style-type: none"> 2. Developing algorithms to detect cyber-attacks in wide area damping control 3. Implementing the algorithms in iPDC <p>For CSE Background Candidates:</p> <ol style="list-style-type: none"> 1. Simulate communication network for smart grid with NS-2/NS-3 network simulator 2. Inject false data injection (FDI) attacks in the communication network 3. Design, Develop, Test, and Document C or C++ software modules that can seamlessly be integrated with an opensource software namely, iPDC (https://sourceforge.net/projects/iitbpdc/) 4. Understand and use open source packages for machine learning on the iPDC for cyber attack detection. 5. Implement secured data communication for communication network using encryption techniques 6. Upgrade the existing Graphical User Interface (GUI) with GTK+ for iPDC software with feature for attack deployment and detection.
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Details of Selection Process:

S. No.	Particulars	Details
1.	Date	<p>Last date to submit application form: 15th February 2022</p> <p>Tentative date of selection process: 16-20th February, 2022</p> <p>(If there is any change in the schedule, it will be notified on the IIT Dharwad website or over email)</p>
2.	Selection process	<p>Link to application form https://forms.gle/FXd1teLggS74nWo79</p> <p>Applications will be screened, and only shortlisted applicants will be called for interview via online mode. Mere fulfilment of minimum eligibility will not bestow the right for shortlisting, IIT Dharwad reserves the right to screen and shortlist candidates by introducing higher benchmarks.</p> <p>Emails will be sent to all shortlisted candidates.</p>
3.	Schedule	Date and Time slots will be communicated through email.
4.	Documents Required	Applicant should have online version of all original certificates including mark sheets (matriculation onwards), experience certificate(s), monthly emoluments/salary drawn, and all other relevant documents (including one set of self-attested certificate(s)/document(s) and updated Curriculum Vitae.

General Instructions to the applicants:

1. Selected candidates shall not have claim on any regular position and shall not be bestowed any of the privileges like Housing, Medical Facility and Other benefits available to the regular employees of the Institute.
2. Applicants are advised to ensure, before appearing for the Selection Process, that they possess the minimum essential qualification and experience laid down for the post. Qualification obtained must

be from a recognized University/Institute. Eligibility in terms of age, qualification and experience of a candidate shall be considered as on the date of Selection Process.

3. The number of vacancies indicated in the notification is tentative. IIT Dharwad reserves the right to increase or decrease the number of advertised posts at the time of selection. Further, IIT Dharwad reserves the right to NOT fill any of the posts advertised.
4. No TA/DA will be paid for attending the Selection Process as it is an online process.
5. In case of any inadvertent mistake in the process of selection, which may be detected at any stage even after issue of the appointment letter, the Institute reserves the right to modify, withdraw or cancel any communication made to the Applicants.
6. After joining the service of the Institute, the person(s) will have to abide by the Rules, Regulations, Ordinances, Statutes and Act of the Institute applicable from time to time. He/She may be assigned any duty within or outside the Institute depending upon the exigency of the work.
7. The Institute shall verify the antecedents or documents submitted by a person 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 person has a clandestine antecedents or background and has suppressed the said information, then his/her services shall be terminated forthwith and legal action may be initiated against such candidates/employees.
8. No interim correspondence whatsoever will be entertained from the candidates.
9. Canvassing in any form or bringing in any influence political or otherwise, will be a disqualification for the post.
10. In case of any dispute/ambiguity that may occur in the process of selection, the decision of the Institute shall be final.
11. For a query related to Selection Process, applicants may send email on [**pbhui@iitdh.ac.in** or **kedark@iitdh.ac.in**]. However, enquiry/queries related to eligibility for the post/interpretation of rules will not be entertained.

Assistant Registrar(R&D)
02 February 2022