



Indian Institute of Technology Indore

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Advertisement for Senior Research Fellow (SRF) position under TEXMiN Foundation sponsored project

IIT Indore invites applications from highly motivated, sincere, hardworking and research-oriented candidates for the position of **Senior Research Fellow (SRF)** in the TEXMiN Foundation sponsored project entitled “**Application of Hyperspectral Imaging for analysis of liquid chemicals in Mining and Industrial Practices**” of **Dr. Puneet Gupta** (Co-PI of the project).

Project Details:

Hyperspectral imaging (HSI) captures spatial and spectral information across a wide range of wavelengths, enabling the detailed identification and characterization of materials. This project focuses on leveraging HSI to analyze liquid chemicals used in mining and various industrial processes. Traditional chemical analysis methods often require direct sampling and complex laboratory procedures, which can be time-consuming and pose safety risks. Our project explores the feasibility of using non-contact hyperspectral imaging to rapidly and accurately identify the composition and concentration of liquid chemicals. This approach aims to improve process monitoring, quality control, and safety in mining operations and industrial applications by providing a nearly real-time, high-resolution chemical analysis without the need for direct physical contact.

Salary: Consolidated emoluments – INR 42000 per month + House Rent Allowance (as per DST norms)

Tenure of the appointment: The appointment is for one year. The appointment is a co-terminus with the project.

Essential Qualification:

1. Masters’ degree (M.Tech./M.E. or M.S.) in CSE, IT, Electronics, and Electrical Engineering/ Technology (with first division in qualifying degree) AND GATE qualification in Computer Science and Information Technology (CS) or Data Science and Artificial Intelligence (DA) OR UGC-NET-LS qualification

OR

M.Sc. degree in Mathematics (with first division as defined by the awarding Institute/ University) AND GATE qualification in Computer Science and Information Technology (CS) or Data Science and Artificial Intelligence (DA) OR UGC-NET-LS qualification

OR

Four-year Bachelor’s degree (B.Tech. or B.S.) or Five-year integrated degree in CSE, IT, Electronics, and Electrical Engineering/ Technology (with first division in qualifying degree) AND valid GATE qualification in Computer Science and Information Technology (CS) or Data Science and Artificial Intelligence (DA).

2. The candidate must have at least two year research experience.

3. The candidate must have at least one research paper in Science Citation Indexed (SCI) or equivalent journal.

Desirable Qualification: Candidates having high quality journal/conference papers in the areas of machine learning, deep learning and hyperspectral imaging, knowledge of programming (MATLAB, R, Python) are encouraged to apply.

Apply: Interested candidates are required to fill up this [Google form](#) latest by **May 11, 2025, 09:00 PM**. Kindly note that incomplete applications will be rejected.

Link to the Google form: <https://forms.gle/YeheWSWKUL5ThaZ38>

In case of any query, kindly mail to deeplearning@iiti.ac.in.

Venue, time and date of online interview: The link for online Google meet will be mailed to the selected candidates only and their interviews will be conducted on **12th May, 2025**. Kindly note that only the shortlisted candidates will be intimated by email for their interview details.

Note: The Institute reserves the right to fill or not to fill the post advertised.