

## **Walk-in interview for Project Associate-I/JRF in a Department of Science and Technology Project**

Applications are invited from Indian citizens for a walk-in interview for the post of Project Associate-I/JRF in a Department of Science and Technology (DST), Natural Resources Data Management System (NRDMS) funded project (IITM/DST/KVU/300) at IIT Mandi.

**Title of the Research Project:** A low-cost MEMS-based and video-based monitoring and early warning system for rainfall-induced landslides.

**Project details:** Landslide Hazard Mitigation is an interdisciplinary and multi-institutional research program being coordinated by the DST under Innovation, Technology Development and Deployment. During the Indian Science Congress, the honorable Prime Minister emphasized the need to develop early warning systems for Landslides particularly in Sikkim and other parts of the North-Eastern region, Himachal Pradesh, Uttarakhand, Jammu Kashmir and Western Ghats. Keeping this in view, a proposal has been developed based on earlier experience on MEMS based low-cost landslide monitoring system, with emphasis on image/video-based monitoring system.

The project aims to employ site-specific measurements of rainfall, moisture, and movement to create ensemble machine-learning (ML) models that generate accurate real-time landslide advisories for every 10-15 minutes at the monitored site. While one side of the project is to develop low-cost mobile / web-based early warning systems (EWSs), using video cameras and IoT. The staff is expected to contribute in conceptualize, develop and calibrate sensors to ascertain soil parameters in relation to soil stability, lab-field-site level deployments, experimentation, and data analyses. Innovation being a primary component, the project delivers development of technology-oriented patents apart from research papers and other developments.

**Minimum qualifications:** BTech/MTech/MS in Computer Science/Application or related areas with a minimum 60% marks. Candidate must have **qualified GATE** at least once in academic career.

**Desirable:** statistical analysis, machine-learning/deep-learning models, image analysis, multidisciplinary interests, publications, experience in IoT and analytics for landslide monitoring and warning, and good command over English language and technical writing in English.

**Joining date:** As soon as possible.

**Position:** Project Associate-I/JRF

**Salary:** Maximum up to INR 31,000

**Duration:** 6 months, and extendable to maximum of 28 months based on performance

Candidates meeting the aforementioned qualification and experience should submit their details and CV online via the following link for the walk-in interview (before 8 pm on 23<sup>rd</sup> July 2021).

<https://forms.gle/NgQYQqUHrtECewjW8>

Walk-in interviews would be conducted in an online mode. The date and time of the interview along with the online link will be shared by email with candidates before the interview.

The decision of the selection committee regarding the interview logistics and selection process for the post will be final.

The selection committee reserves the right to fill or not fill the advertised post.

For any additional clarifications/information, please contact Prof. K. V. Uday (PI) at [uday@iitmandi.ac.in](mailto:uday@iitmandi.ac.in)