

Advertisement for Project Associate-I (JRF)/ Project Scientist in DST Project
(IITM/DST/KVU/300)

Online Interview for the post of Project Associate-I (JRF) in the DST-funded project at IIT Mandi.

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

Detail regarding project: Landslide Hazard Mitigation is an interdisciplinary and multi-institutional research program being coordinated by the DST under Innovation, Technology Development and Deployment. A novel technique has been developed based on earlier experience on MEMS based low-cost landslide monitoring system, with emphasis on image/video-based monitoring system. In line with requirements, 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 JRF is expected to contribute in conceptualize, develop and calibrate sensors to ascertain soil parameters in relation to soil stability, development of physical or working experimental models on soil slope stability, lab-field-site level experimentation, data analysis leading to geotechnical assessments. Innovation being a primary component, the project delivers development of technology-oriented patents apart from research papers and other developments.

Minimum Qualification:

B. Tech (Civil Engineering) + M. Tech (Geotechnical Engineering or related areas), Candidate must have qualified GATE at least once in an academic career.

Desirables: Multi-disciplinary interest, Statistical Analysis, Machine learning coding, good command over English language and technical writing in English.

Joining date: As Soon As Possible

Principal Investigator(s): Dr K V Uday (PI), School of Engineering, IIT Mandi, Dr Varun Dutt & Dr Arnav Bhavsar, School of Computing and Electrical Engineering, IIT Mandi

Position: Project Associate-I/(JRF)

Salary: Max. up to INR 31,000/-

Duration: 12 months, extendable subject to satisfactory performance.

Last Date of sending CV: 6th Feb., 2022 via online on following google link
<https://forms.gle/Sdk127NBcrAGPHqB9>

Note: Merely fulfilling the eligibility requirement does not guarantee to shortlist for interview; The committee may fix the higher criteria to restrict the number of candidates.

Date and time of the interview along with the meeting link will be shared by email to the shortlisted candidates.