

**Position: Project Associate/Research Fellow for mechanics and machine learning**

**Research Group Description:** Our research group- Dynamics, Data and Design lab is based in the Mechanical Engineering department of the Indian Institute of Science. In the Dynamics, Data and Design lab we focus on leveraging state-of-the-art machine learning techniques to characterize novel materials to enable optimized design of better structures and products. To achieve this, we work on both- developing experiments (usually dynamic) and machine learning frameworks.

**Role Description:** This is a full-time, on-site role for a Research Associate/Research Fellow at the Indian Institute of Science (IISc). The Junior Researcher will be responsible for helping set up experimental facilities and work on improving/developing machine learning frameworks. The role will primarily need good work ethic and eagerness to learn. Additionally, a working understanding of solid mechanics or machine learning is a pre-requisite.

**Qualifications:**

- A good understanding of the basics of solid mechanics – stress and strain tensors, basics of plasticity, etc. Knowledge of continuum mechanics, and experience using FEM solvers like Abaqus is a plus.

OR

A good understanding of, and demonstrated experience with, machine learning- neural networks, GPRs, Reinforcement Learning ,etc.

- Proficiency and experience in programming languages like MATLAB and python
- A minimum of Bachelor's degree in a related Engineering discipline such as (but not limited to) mechanical, aerospace, material science and electrical engineering, computer science. Candidates about to receive their Bachelors degree this year can also apply.

**Salary:** As per institute/DST norms commensurate with the experience and qualifications of the candidate.

**Duration:** For a maximum period of 1 year with a probation period of three months.

**Application:** Interested candidates are requested to contact Dr. Akshay Joshi from IISc's department of Mechanical Engineering at [akshayjoshi@iisc.ac.in](mailto:akshayjoshi@iisc.ac.in) before June 21<sup>st</sup> 2024. Applications will be processed as and when they are received, so please do not wait till the last day to apply. Shortlisted candidates will be contacted for an online interview. In your mail, please include the following:

- Your CV with at-least two appropriate references.
- A small paragraph (3-4 sentences) detailing what motivated you to apply for this position.