Indian Institute of Science
***Project Associate Position** in Aerospace Engineering, IISc*

Research area: Turbulent flows – CFD and Data science

Job Description: Turbulence is observed in most flows around us and is of particular importance in Aerospace and other fields of engineering. Turbulence constitutes a strongly nonlinear, non-conservative, extremely high-dimensional complex system that has been a challenge to fully understand. The recent advancements in our computational capabilities and data-driven techniques now provide an excellent opportunity to establish a deeper physical understanding of turbulent flows and model such physics to make computations of a wide array of real-life turbulent flows possible.

Applications are invited for the position of a Project Associate interested to pursue research in understanding and modelling the complex flow physics and small-scale dynamics of turbulent flows. The project will involve CFD simulations of turbulent flows, applying data-driven methods to turbulent flows to infer physics, and development of physics-based neural network models of turbulence small-scale dynamics.

Essential Qualifications: Candidates must have a BTech or MTech degree in Aerospace Engineering, Mechanical Engineering or related fields.

Desired Qualifications: Candidates must have a strong background and interest in fluid dynamics and turbulence. Candidates with prior experience in programming, specifically in DNS/LES, Data science & Machine learning, High-performance computing are preferred for this position.

Preferred Skills: Computational Fluid Dynamics, Data science & Machine learning, High-performance computing

Duration: 1 year with a 3-month probation.

Salary: As per IISc norms

Application procedure: To apply, please send an email to Prof. Rishita Das at rishitadas@iisc.ac.in with a *cover letter* expressing your research interests and experiences in this area, your latest *CV* including names of *at least two references* for letters of recommendation, and University transcripts if available. Last date to send your application is 31-Oct-2023.
If you have any questions or need further information, please email Prof. Rishita Das.

Date of Announcement: 11-Sep-2023