

Online interview for 2 positions (PDF) in a sponsored R&D project

We are looking for young, creative and enthusiastic candidates to contribute in a DST sponsored research project conducted as part of National Supercomputing Mission (NSM) titled "Robust Wind Energy Conversion System – when deep learning meets sustainable energy utilization."

For Period: 9 months

Position available: 2 (PDF) Essential Qualifications:

- **1.** Ph.D. from a reputed institute with hands-on research expertise in CFD and Turbulence modeling and some experience in machine learning / parallel programming using GPU-based platforms such as CUDA, OpenCL, OpenACC.
- **2.** Ph.D. from Departments of Mechanical / Chemical / Electrical / Computer Science and engineering / Physics / Mathematics are encouraged to apply.
- **3.** Any publication in these areas with proof of candidate's contribution is desirable. PhD degree received from 2016 to till date will be considered (scholars who have submitted their thesis will also be considered). At least three international peer-reviewed journal/conference publications in aforementioned areas will be required.

Age: Not more than 35 years as on June 12, 2022

Desirable: Project is purely simulations-based where the candidate is supposed to perform wake modelling in wind farms using CFD and machine learning based methods. Knowledge and extensive experience in turbulence modeling (e.g., LES), development and implementation of CFD codes and acceleration of CFD codes using GPU-based parallelization (CUDA/OpenCL/OpenACC) are desired. Experience in Wind energy conversion systems and Wake modelling will be considered a plus. The candidate should be able to convert serial codes of Machine Learning into corresponding parallel versions for running in HPCs and GPU servers. Experience in C/Fortran, MATLAB and Python is desirable.

Monthly stipend: As per the revised GOI norms listed by DST based on the entry level of RA.

Date, Venue and time of interview will be intimated after the shortlisting is done. Note:

- 1. No TA/DA will be paid for the candidates appearing in the interview.
- 2. If no candidate is found suitable, position may remain vacant.
- 3. Only the shortlisted candidates will be intimated over e-mail for the interview.

Project Investigator(s)

Kishalay Mitra, Professor and Head, Dept. of Chemical Engineering Soumya Jana, Professor, Dept. of Electrical Engineering