

**Department of Computational and Data Sciences
Indian Institute of Science
Bangalore – 560012**

July 10, 2024

Advertisement No: CDS/SV/DST Project/HPC-VIS-CLIMATE/July-2024

Advertisement for Research Associate Position

We invite applications for the positions of **Project Associate I, Project Associate II and Research Associate I** in a project investigated by Profs. Sathish Vadhiyar (Department of Computational and Data Sciences), Vijay Natarajan (Department of Computer Science and Automation) and PN Vinayachandran (Centre for Atmospheric and Oceanic Sciences) in Indian Institute of Science.

The project is related to development of high performance / parallel computing, and visualization strategies and codes for climate modelling applications. The project has the following components.

1. Scalable high-performance simulations
 - a. Profiling and benchmarking of parallel applications
 - b. Parallel I/O methods
 - c. GPU-based algorithms
2. Visualization methods
3. Large-scale climate model studies

Roles and Responsibilities:

Following are the roles and responsibilities for the three positions.

1. **Project Associate I:** For research and development on HPC and visualization works.
2. **Project Associate II:** For advanced research and development on HPC, visualization and ocean model works depending on skills
3. **Research Associate I:** For research and development on all components, and to integrate the overall components of the project into a comprehensive framework and perform advanced scientific studies.

For visualization works, the role includes development of data visualization and data analysis techniques, algorithms for feature extraction, exploration of 3D time-varying data.

Required Qualifications and Remuneration

SNo	Position	Age Limit	Education and Experience Qualification Required	Salary
1	Project Associate I	25	BE/BTech in Computer Science or related field.	Rs. 25,000/- + HRA (27% of Basic Pay)
2	Project Associate II	28	BE/BTech in Computer Science or related field And 2 years' work experience	Rs. 28,000/- + HRA (24% of Basic Pay)

3	Research Associate I	30	PhD in Computer Science or related field	Rs. 58,000/- + HRA (27% of Basic Pay)
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Note: The candidate should have secured at least a first class in all the undergraduate and graduate degrees.

Other essential qualifications include the following.

- Strong familiarity with C and Unix is required. In all cases, strong background in Linux, operating system concepts and programming are required.
- Experience in OpenMP/MPI/CUDA-based parallel applications is desired.
- Experience in computer graphics, data visualization, or image processing is desired for work related to data analysis and visualization
- The candidate is expected to have good communication skills and should be willing to work in a team environment.

Terms of Appointment: This is a contract appointment, initially for one year and renewable thereafter based on an annual evaluation of performance.

How to Apply: Interested candidates may send their Bio-data (preferably in pdf format, with subject marked “Advertisement No. CDS/SV/DST_Project/HPC-VIS-CLIMATE/July 2024 by email to: vadhiyar.positions@gmail.com

Last date for application: July 31, 2024.

General Instructions:

- The contract can be terminated at any time by giving one month’s notice, by either side.
- No accommodation will be provided in the Institute campus.

Contact Details:

Dr. Sathish S. Vadhiyar,
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Supercomputer Education and Research Centre,
Indian Institute of Science,
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