Department of Computational and Data Sciences Indian Institute of Science Bangalore - 560012

Advertisement No: SERB/Jan-2023

Date: 18/01/2023

Advertisement for JRF Position in Deep Learning

Indian Institute of Science (IISc) now seeks to recruit one JRF for a SERB funded Core Research Grant project on fast and scalable Deep Learning algorithms for onboard routing of autonomous underwater vehicles.

Specific Roles & Responsibilities: The primary tasks will include the following.

- Develop Deep Learning models for onboard routing applications.
- Implement graph neural networks, decision, and trajectory transformers.
- o Run experiments on GPU workstations, log results, do hyperparameter tuning.
- o Communicate your results succinctly including writing and speaking.
- Preparing and submitting manuscripts for AI conferences.

Essential Qualifications:

- B.Tech/BE/M.Tech/ME in Computational and Data Sciences, Computer Science and Engineering, Mechanical Engineering, Applied Mechanics, Electronics and Communication Engineering, Mathematics and Computing, or equivalent subjects.
- Must know: Deep Learning Concepts and Implementation using popular frameworks (either Keras/TF or PyTorch), Mathematics (at an advanced UG level), git version control, python programming.
- Ability to learn new things quickly, at depth and apply them in practice correctly.
- o Comfort with fast paced work environment and back-to-back deadlines

Working in Linux and maintaining code hygiene are required. The candidate is expected to have good communication skills (speaking and writing) and should be willing to work in a team environment. If you do not have deep learning experience, please gain experience through online courses and apply with a GitHub page of your projects. Other applications will not be considered.

Salary – DST/SERB mandated salary applicable for these posts is given below. Campus accommodation is not available for project staff.

(i) JRF Rs. 20,000 to 31,000 p.m. + HRA (depending on meeting the qualifications as per DST/SERB guidelines)

Terms of Appointment: This is a contract appointment, initially for one year and renewable thereafter based on an annual evaluation of performance for up to 2.5 years. Our lab is in IISc Bangalore, and the position is envisaged to be in-person. Remote working options are not available.

Conversion to Ph.D.: Outstanding candidates will be considered for admission to our regular M.Tech (Res) or Ph.D. program and stand a good chance in gaining an accelerated Ph.D. (subject to all IISc norms and regulations)

Indirect Perks: Coaching for applying to doctoral programs abroad, teaching opportunities with additional pay, industry networking, state-of-the-art computational facilities.

How to Apply: Interested candidates may send their resume (preferably in pdf format or website), with subject marked "Advertisement No. SERB/Jan-2023" by email to: <u>deepakns@iisc.ac.in</u>.

Online Interview: If your application is successful, you should appear for an online interview to be scheduled on a mutually convenient time.

Last date for application: 1st review of applications will be completed on <u>Feb 05, 2023</u>. Thereafter this advertisement will be a standing advertisement until the position is filled.

Anticipated Start Date: 01 March 2023

Principal Investigator: Dr. Deepak Subramani (http://cds.iisc.ac.in/faculty/deepakns/)