

इंडियन इंस्टीट्यूट ऑफ टेक्नोलॉजी दिल्ली

हौज खास, नई दिल्ली -110016

(औद्योगिक अनुसंधान एवं विकास इकाई)

INDIAN INSTITUTE OF TECHNOLOGY DELHI

Hauz Khas, New Delhi-110016

(Industrial Research & Development Unit)

No. IITD/IRD/RP04163G/

75)

Dated:04/01/2022

Advertisement No.: IITD/IRD/004/2022

Applications from Indian nationals are invited for Project Appointment under the following project. Appointment shall be on contractual basis with consolidated pay, renewable yearly or upto the duration of the project, whichever is earlier. निम्नलिखित परियोजना के तहत भारतीय नागरिकों से आवेदन आमंत्रित किए जाते हैं। अपॉइंटमेंट, अनुबंधित आधार पर समेकित वेतन, नवीकरणीय वार्षिक या परियोजना की अवधि तक, जो भी पहले हो, के साथ होगा। This is a mission-mode project that involves development of a robotic manipulation system capable of physical interaction with objects as directed by a human partner. The project involves software development, use of Artificial Intelligence techniques and experimentation on a standard ROS enabled robot manipulator and base.

Title of the Project	Development of a Cognitive Model for an Intelligent Robotic Teammate (RP04163G)	
Funding Agency	DRDO, Ministry of Defence, New Delhi	
Name of the Project Investigator	Prof. Rohan Paul [email ID:sunita.cseiitd@gmail.com]	
Deptt./Centre	Department of Computer Science & Engineering	
Duration of the Project	Upto:06/09/2024	
Post (s)	Consolidated fellowship / Pay-slab	Qualifications
Principal Project Scientist (1) (Software Specialization)	Rs.56,000-60,000-64,000-69,000-74,000-79,000/- p.m. plus HRA @ 24%	Essential: Ph.D. with 1st class in the appropriate discipline (computer science or electronics or mechanical) or equivalent, OR M. Tech. with 1st class in the appropriate discipline (computer science or electronics or mechanical) or equivalent with at least 6 years experience. Desirables: •Strong background with C++ or Python software development, algorithms and Object-oriented design. • Proficiency in build system (CMake or Makefiles), Ubuntu/Linux OS (including Networking and device drivers). •Experience with Robot Operating System (ROS), Gazebo/PyBullet simulation and motion planning with ROS Moveit. •Exposure to planning/control/localization with sensors for a robotic manipulator or a ground robot.
Sr. Project Scientist (1)	Rs.45,000-48,200-51,400-55,400-59,400-63,400/- p.m. plus HRA @ 24%	Essential: M. Tech. with 1st class in the appropriate discipline (computer science or electronics or mechanical) with at least 2 years experience. OR B.Tech. with 1st class in the appropriate discipline (computer science or electronics or mechanical) or equivalent with 5 years experience. Desirable: • Strong C++ or Python software development, object-oriented design and algorithms. • Proficiency in build system (CMake or Makefiles), Ubuntu/Linux OS and Networking and device drivers. • Experience with Robot Operating System (ROS), Gazebo/PyBullet simulation and motion planning with ROS Moveit. •Exposure to planning/control/sensor fusion for a robotic manipulator or a ground robot. •Basic exposure to AI/ML tools (e.g., natural language processing).
Project Scientist (1) (Software/Embedded Role for Robot Perception)	Rs.35,400-37,900-40,400-43,600-46,800-50,000/- p.m. plus HRA @ 24%	Essential: M. Tech. with 1st class or equivalent in the computer science or electronics discipline with GATE* and with at least 1 years experience. OR B. Tech. with 1st Class or equivalent in the computer science or electronics discipline with GATE* and with at least 3 years experience. Desirable: Strong proficiency in coding in C++ or Python and working with Ubuntu/Linux operating system. Experience in working with cameras, calibration and image processing. Experience with Robot Operating (ROS) and Gazebo/PyBullet simulation, ROS Image tools/ Point Cloud Library. • Experience with Deep Learning models and frameworks (e.g., PyTorch). *The requirement of GATE qualification may be relaxed by the committee in case of highly meritorious candidates.

Contd....

Project Scientist (1) (Mechanical Role for Robot Manipulation)	Rs.35,400-37,900-40,400-43,600- 46,800-50,000/- p.m. plus HRA @ 24%	Essential: M. Tech. (1st class) or equivalent in mechanical engineering discipline (or a similar engineering discipline) with GATE* and with at least 3 years experience. OR B. Tech. with 1st class or equivalent in mechanical engineering discipline (or a similar engineering discipline) with GATE* and with at least 1 years experience. Desirable: •Proficiency in CAD/CAM/CAE. • Practical experience in planning/control robot manipulator or ground vehicle. • Basic skills in coding in C++ or Python. • Basic experience with Robot Operating System (ROS), Gazebo/PyBullet simulation and motion planning with ROS Moveit. *The requirement of GATE qualification may be relaxed by the committee in case of highly meritorious candidates).
Project Assistant (Tech.) (1)	Rs.29,200-31,200-33,200-35,800- 38,400-41,000/- p.m. plus HRA @ 24%	Essential: Diploma (3 years duration)/Graduate Degree in appropriate discipline (electronics/mechanical/computer science) with at least 3 years relevant work experience OR ITI (2 years. duration) in relevant field with 8 years relevant work experience. Desirable: Experience in assembling, cabling and maintenance of electrical equipment/computer hardware systems. Experience in basic CAD design, Circuit assembly perform rapid prototyping/CNC operations jobs and fitment. Ability to install softwares on PCs (additional disks & Computer Peripherals)
Project Assistant (Admin) (1)	Rs.29,200-31,200-33,200-35,800- 38,400-41,000/- p.m. plus HRA @ 24%	Essential: Graduate degree with 2 years' work experience as Sr. Assistant or equivalent post/scale. Desirables: Proficiency in MS Excel (including entering formulae and performing calculations for accounting), MS Word and MS Powerpoint. Proficiency of communication in English. Experience with GEM Portal and ordering of lab components/equipment.

The posts may be downgraded as per discretion of the Selection Committee if none of the candidate is found suitable for the post.

The candidates who are interested to apply for the above post should download Form No. IRD/REC-4 from the IRD Website (<http://ird.iitd.ac.in/rec>) of IIT Delhi and submit the duly filled form with complete information regarding educational qualifications indicating percentage of marks/division, details of work experience etc. by e-mail with advertisement No. on the subject line at email id: sunita.cseiitd@gmail.com

IIT Delhi reserves the right to fix higher criteria for short-listing of eligible candidates from those satisfying advertised qualification and requirement of the project post and their name will be displayed on web link (<http://ird.iitd.ac.in/shortlisted>) alongwith the interview details. Only short-listed candidates will be informed for online interview. A test may be conducted for certain positions. Candidates may also be required to furnish any samples of software/code developed by them in the past. In case any clarification is required on eligibility regarding the above post, the candidate may contact Prof. Rohan Paul at email id: sunita.cseiitd@gmail.com

5% relaxation of marks may be granted to the SC/ST Candidates. In case of selection of a retired/superannuated government employee, his/her salary will be fixed as per prevailing IRD norms. अनुसूचित जाति / अनुसूचित जनजाति के उम्मीदवारों को अंकों की 5% छूट दी जा सकती है. एक सेवानिवृत्त सरकारी कर्मचारी के चयन के मामले में उसका वेतन वर्तमान आईआरडी मानदंडों के अनुसार तय किया जाएगा।
The last date for submitting the completed applications by e-mail is 18/01/2022 by 5.00 p.m.

सहायक कुल्सचिव, आईआरडी

वितरण

- Head of the Deptt./Centres/Units :
- Webmaster, IRD :
- Notice Boards
- Advertisement file
- Prof. Rohan Paul, PI, Department of Computer Science & Engineering
- Copy to Chairperson, DRC/CRC
- Dr. Harshita Bhatnagar, RD Coordinator, (R&D) Wing

It is requested that the contents of the Above Advt. be brought to the notice of the staff working in your Deptt./Centre/Unit To put advertisement at IITD website.