Junior Research Fellow (JRF) and Project Assistant positions in the area of Robotics / Control Systems

Broad Subject Area: Robotics / Control Systems

Minimum Qualification: B.Tech / B.E. in Mechanical / Electrical / Aerospace / Biomedical Engineering or allied areas with specialization in either robotics or control systems from a reputed institute or university.

Salary Range: Monthly remuneration will be in the range of Rs. 25,000 to Rs. 30,000 per month.

Project: Robotic Exoskeleton and Self-Learning Robots With Impedance Control.

Desired Background: Strong foundation in dynamics and control of robotic systems is highly desired. Prior experience with building robotic systems and/or other experimental skills will be desirable.

No. of posts: 2

Description:

We have openings for JRF/Project assistant to work on projects with heavy experimental as well as simulation components on robotic systems including a gait rehabilitation exoskeleton system and a self-learning robot with impedance control. These projects involve designing and building hardware systems (with force feedback and force control) and possibly testing them with human subjects. The candidates are expected to have strong interests and some prior foundation in dynamics, control, and/or robotics. Some prior expertise in designing and building robot hardware will be helpful. Familiarity with Matlab, LabVIEW and National Instrument (NI) based data acquisition systems will be a plus. The successful candidates are also expected to bring a positive and enthusiastic attitude to the lab and work collaboratively with several other lab members on this project. An open-mindedness and a willingness to learn new hardware, software and theory skills as the project demands is a must. The successful candidates should be proficient in written and verbal communication, which is necessary to collaborate effectively in a multidisciplinary team environment and present and explain the technical information.

The candidate will work in the SysIDEA lab (<u>website</u>, <u>youtube channel</u>) and will have plenty of opportunities to interact and collaborate with other labs in mechanical engineering, electrical engineering, and in cognitive sciences. The lab has a vibrant environment and has a diverse and interdisciplinary set of individuals and we work on a range of robotics and control systems

projects ranging from fundamental theory and its hardware validation to robotic systems for specific applications (with human subject trials in some cases).

The tenure for this position is one year.

Please submit the resume and a short statement of 500 words highlighting your career goals and your motivation to apply for this position, and a list of references (preferably three) using <u>this</u> form here latest **by May 20, 2021**. For any questions, you may write to Prof. Harish P. M. at <u>sysidea@iitgn.ac.in</u>.