

**Department of Mechanical Engineering**  
**THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY,**  
**Thapar Technology Campus, Patiala – 147004 (INDIA)**

**Dated: Feb 24, 2020**

**Advertisement for the Post of Post-Doctoral Fellow (PDF)**

Applications are invited from self-motivated, highly dedicated and eligible Indian nationals for the position of **Post Doctoral Fellow (PDF) (on contract)** in a DRDO CARS research project entitled “**Dynamic Modeling and Control Design of Augmentative Lower Extremity Exoskeleton**” vide file no. DEBEL/20CR0002/BMT/19-20 dated Jan 16, 2020 sponsored by **DRDO Defence Bio Engineering and Electromedical Laboratory (DEBEL), Bangalore.**

**Job Description**

DEBEL has taken up this CARS project for development of augmentative exoskeleton for the soldiers. The current prototype developed at DEBEL consists of mechanical structure, joint actuators, sensing electronics and control system. The control algorithm which is implemented in the existing prototype, is Proportional Position Control, requires tuning for different joint trajectories for different individuals as well as for different walking speeds. Also, there is a significant delay between the sensor command and the actual response of the actuator. The improved controller which can handle the parameter variations and can adapt to the different subjects and also can minimize the wearer’s effort while walking, will be more suitable for the lower extremity exoskeleton.

**Only PDF version** of duly completed application on prescribed format must reach to:

Dr. Ashish Singla (**email: ashish.singla@thapar.edu**) *on or before July 22, 2020.*

<b>Number of Position:</b>	1 (One)
<b>Essential Qualifications:</b>	<p>PhD degree (submitted/defended) in Engineering in the areas related to robotics, exoskeleton, multi-body dynamics, assistive devices, control.</p> <p>The applicant must have Post-Graduate (M.E./M.Tech.) degree with specialization in Robotics/Design/CAD-CAM/ Mechatronics/ Bio-Medical/Electrical/Electronics/Instrumentation and other relevant areas with marks not below 60% (6.5 CGPA) and should possess basic under-graduate B.E./B.Tech. degree with marks not below 60% (6.5 CGPA).</p>
<b>Desirable Experience:</b>	<p>(i) Good research potential in the related area in the form of demonstrative research publications and projects.</p> <p>(ii) Good hardware knowledge along with languages such as LabVIEW / MATLAB</p> <p><b>NOTE:</b> Please do not apply if you are not well-versed and comfortable with the computational programming languages.</p>

<b>Fellowship:</b>	Rs. 55,000/- (consolidated)
<b>Age Limit:</b>	Below 40 years on the last date of application (Relaxation for SC/ST/OBC candidate as per Government of India norms).
<b>Tenure of Appointment:</b>	One year (contractual)
<b>Last Date to Apply</b>	July 20, 2020
<b>Tentative Interview Date</b>	July 27, 2020 (will be notified via email)

**NOTE:**

- 1) Each candidate has to submit two letters of recommendation.
- 2) Only candidates having excellent academic record and a keen interest in research are encouraged to apply.
- 3) The applicant will be responsible for the authenticity of information, other documents and photograph submitted.
- 4) Mere possessing the prescribed qualification does not ensure that the candidate would be called for interview. The candidates will be shortlisted on the basis of merit and need of the project and will be informed through email only.
- 5) Shortlisted candidates have to personally appear for the interview on the scheduled interview date and time, with updated CV and original and attested photo copies of marks sheets/ certificates in support of their academic qualifications.
- 6) Applicants in employment (private, government or any other organization) are required to submit a “**No Objection Certificate**” from the employer at the time of interview.
- 7) No TA/DA will be paid for appearing in the interview.

**Contact Person: Dr. Ashish Singla**

Associate Professor,  
Department of Mechanical Engineering  
Thapar Institute of Engineering and Technology  
Patiala-147004

**Email ID:** [ashish.singla@thapar.edu](mailto:ashish.singla@thapar.edu)

# Application Form

1) Application for the post of:

2) Personal Details:

- Name of the Candidate:
- Gender (M/F)
- Category (GN/SC/ST/OBC)
- Date of Birth:
- Age (as per last date of application):
- Nationality:

Photograph

3) Email Address:

4) Mailing Postal Address:

5) Educational Qualifications:

S. No.	Name of Exam Passed	Subjects/ Branch/ Specializations	Name of the University/Board	Month & Year of exam passed	Percentage of Marks/ CGPA
1.	X				
2.	XII				
3.	Graduation				
4.	Post Graduation				
5.	PhD				
6.	Any Other				

6) Particulars of GATE examination (optional):

- Year of passing:
- Discipline:
- Score (percentile):
- All India Rank:
- The number of candidates appeared:

7) Details of Work Experience:

(Furnish details such as name of the post/fellowship, period worked, name of the organization etc.)

8) Number and details of research papers published (only SCI or Scopus Indexed):

9) Details of experimental projects handled (If any):

10} Any other relevant information to support your application

Date:

Signature of the Candidate