

Advertisement for Research Associate (RA) position in the Department of Civil Engineering, IIT Hyderabad

Date of advertisement: 22.01.2024 Last date for application: **05.02.2024**

Applications are invited from eligible candidates with excellent academic background and proficiency in computational modelling and analysis for the position of Research Associate (RA) in the following research project in the Department of Civil Engineering, IIT Hyderabad.

| Name of the post | Research Associate – I |
|--------------------------|--|
| Number of vacancies | 1 |
| Monthly salary | Rs. 58,000/- + HRA@27% |
| Appointment period | 12 months |
| Title of the research | Pavement-friendly Autonomous Vehicle Platooning through preset Inter- |
| project | Vehicular Wheel Wandering Offsets |
| Principal Investigator | Dr. M. Roshan Khan, Dept. of Civil Engineering, IIT Hyderabad |
| Funding agency | DST NM-ICPS Technology Innovation Hub on Autonomous Navigation |
| | (TiHAN), IIT Hyderabad |
| Key responsibilities | Computational modelling and analysis of road pavement sections |
| | • Cyclic moving load simulations using user-defined subroutines |
| | • Numerical simulation of autonomous vehicle dynamics on pavements |
| | • Constitutive modelling of geomaterials using mathematical models |
| | • Laboratory experiments in pavement engineering laboratory |
| | • Design guidelines for reducing AV-accelerated pavement damages |
| | • Documentation of results and publication of research findings |
| Essential qualifications | Ph.D. in Civil Engineering: Geotechnical / Transportation Engineering |
| _ | (or) |
| | M.Tech. in Civil Engineering: Geotechnical / Transportation Engineering |
| | with at least 3 years of relevant research experience |
| Essential skills | • Expertise in numerical modelling and analysis |
| | • Hands-on experience using FEA package Abaqus |
| Desirable skills | Hands-on experience conducting pavement laboratory experiments |
| | • Strong mathematical, analytical and computational skills |
| | • Track record of authoring high-quality research publications |
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Details of the vacancy:

Interested candidates are requested to send the following documents via email to roshan@ce.iith.ac.in with the subject of the email as "Application for RA position":

- 1. Latest CV
- 2. Scanned copies of degree certificates and grade sheets (Ph.D., M.Tech. and B.Tech.)
- 3. Statement of purpose
- 4. PDF copies of the top three research publications
- Shortlisted candidates will be contacted via. email and invited for an online interview.
- The selected candidate is expected to **join immediately**.
- Accommodation is not available on campus. The selected candidate is expected to make his/her own arrangements for the accommodation. HRA will be paid as per norms.