Job Notification Form, IIT Delhi

Company Overview

Name: Honda R&D

Website: honda.co.jp

Company Type: Other (1)

Description: Honda R&D Co. Ltd

Job Details

Designation: 1) AI Researcher

Type: Information Technology

Place of Posting: Tokyo, Japan

Job Details: 〈Honda R&D Innovative Research Excellence, Honda Innovation Lab, Computer Science〉
Honda is working towards the research and development of technologies that realize intelligent mobility systems for personal cars (i.e., AD & ADAS) and new generation shared mobility. Our concept, which we call as “Cooperative Intelligence (CI)”, utilizes AI technologies to allow cooperation with the user rather than full automation which is independent from the user. Our CI systems interact with the user to reduce user risk, anxiety and inconvenience, in turn realizing “freedom of door-to-door movement”. We believe that the interaction among the system, the user and the peripheral traffic society including other road users should be based on mutual understanding and cooperative action. To achieve this, we consider mobility scenario related computer vision issues (e.g. traffic environment recognition, road user behavior prediction, pedestrian gesture recognition, pedestrian attribute recognition, landmark recognition, high level scene understanding), cooperative action planning and man-machine communication interface as some of our core challenges.Honda is working towards the research and development of technologies that realize intelligent mobility systems for personal cars (i.e., AD & ADAS) and new generation shared mobility. Our concept, which we call as “Cooperative Intelligence (CI)”, utilizes AI technologies to allow cooperation with the user rather than full automation which is independent from the user. Our CI systems interact with the user to reduce user risk, anxiety and inconvenience, in turn realizing “freedom of door-to-door movement”. We believe that the interaction among the system, the user and the peripheral traffic society including other road users should be based on mutual understanding and cooperative action. To achieve this, we consider mobility scenario related computer vision issues (e.g. traffic environment recognition, road user behavior prediction, pedestrian gesture recognition, pedestrian attribute recognition, landmark recognition, high level scene understanding), cooperative action planning and man-machine communication interface as some of our core challenges.

<Responsibilities>
The associate will research on one or some of above core challenges. He/she will

set technical problems to be solved, find out possible solving approaches, and evaluate them not only in theory but also on a physically working system. In addition, Honda expects him/her to create novel algorithms to provide better performances than the state-of-the-art algorithms in the respective research problem.

<Specific Goals>
[1st -2nd year]
Conduct a feasibility study of traditional and novel approach for limited scene. The associate will not only research and execute algorithms but also participate in appropriate data collection and evaluations.

[3rd -5th year]
The associate will generalize his/her proposed algorithm for wider scenes, and demonstrate it on a prototype (physically working machine) in public area.
*The associate will have a chance to get selected for a training program at Honda's research center at Silicon Valley of U.S.A based on his/her ability and research outputs.

SKILLS
Preferred Skill Set would be Basic Knowledge or Practical Experience in few of the following
- Fundamental AI technologies such as machine learning especially regarding deep neural networks (DNNs) for computer vision and natural language understanding
- Optimization, Probabilistic Inference, and Data Mining
- Model-based control (model predictive control, Kalman filter, adaptive control, etc.)

In addition to the above, having the following traits and skills would be a plus :
-Desire to create technology which would be world's first and contribute to the world
- Desire to provide new UX and value to customers through mobility
- Desire to challenge new things
- Energy to set high goals and go through with them
- Ability to actively communicate one's own ideas and find the best means of problem solving by involving those around you
- Communication skills that can help communicate cheerfully with various stakeholders
- Desire to work in a multi culture and multi language environment

* No preliminary knowledge of japanese is expected, we provide language training support depending on employee requirements "

International: Yes

Joining By: 1 October 2023

Salary Details

CTC:	8,852,500 JPY Per Annum
Gross:	8,290,000 JPY Per Annum
Base Salary:	5,800,000 JPY Per Annum
Joining Bonus:	0 JPY Per Annum
HRA:	1,030,000 (min) -1,030,000 (max) JPY Per Annum

Medical Allowance:	0 (min) -0 (max) JPY Per Annum
Other cash benefits part of gross:	1,460,000 (min) -1,460,000 (max) JPY Per Annum
RSUs:	0 JPY Per Annum
ESOPs:	0 JPY Per Annum
Performance/other bonuses:	562,500 (min) -1,125,000 (max) JPY Per Annum
Other cash benefits part of CTC:	0 (min) -0 (max) JPY Per Annum
Other Cash Benefits:	CTC Breakdown [Annual] • Basic salary: 5,800,000 JPY • Allowance(Meal, Commuting, etc): 460,000 JPY • House Rent: 1,030,000 JPY • JPN language lesson: 1,000,000 JPY After every 6 months of evaluation: 1. Output meets the assignments: no incentive (CTC: JPY 8290000) 2. Outstanding outputs: additional bonus of JPY 562500 (CTC: JPY 8290000+562500) 3. Supreme outputs: additional bonus of JPY 1125000 (CTC: JPY 8690000+1125000) So maximum CTC a candidate can get after 1 year depending upon his performance is JPY 8290000+ 1125000+ 1125000 = JPY 10540000

Selection Process

Resume Shortlist:	No
Written Test:	No
Online Test:	Yes
Group Discussion:	No
Medical Test:	No
Personal Interview:	Yes
No. of Rounds:	2
No. of Offers:	4
Minimum CGPA:	N/A

Eligibility

Recruiting PHDs: Yes

Eligible Departments: B.Tech in Biochemical Engineering & Biotechnology, B.Tech in Chemical Engineering, B.Tech in Civil Engineering, B.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering, B.Tech in Electrical Engineering (Power and Automation), B.Tech in Engineering Physics, B.Tech in Mathematics & Computing, B.Tech in Mechanical Engineering, B.Tech in Production & Industrial Engineering, B.Tech in Textile Engineering, B.Tech and M.Tech in Biochemical Engg & Biotechnology, B.Tech and M.Tech in Chemical Engineering, B.Tech and M.Tech in Computer Science & Engineering, B.Tech and M.Tech in Mathematics & Computing, M.Tech in Applied Optics, M.Tech in Atmospheric-Oceanic Science and Technology, M.Tech in Biomedical Engineering, M.Tech in Chemical Engineering, M.Tech in Communications Engineering, M.Tech in Computer Science & Engineering, M.Tech in Computer Technology, M.Tech in Construction Engineering & Management, M.Tech in Control & Automation, M.Tech in Cyber Security, M.Tech in Electric Mobility, M.Tech in Energy & Environment Technologies and Management, M.Tech in Energy Studies, M.Tech in Engineering Analysis & Design, M.Tech in Environmental Engineering & Management, M.Tech in Fibre Science & Technology, M.Tech in Geotechnical and Geoenvironmental Engineering, M.Tech in Industrial Engineering, M.Tech in Instrument Technology, M.Tech in Integrated Electronics & Circuits, M.Tech in Materials Engineering, M.Tech in Mechanical Design, M.Tech in Molecular Engineering: Chemical Synthesis & Analysis, M.Tech in Optoelectronics & Optical Communication, M.Tech in Polymer Science and Technology, M.Tech in Power Electronics, Electrical Machines & Drives, M.Tech in Power Systems, M.Tech in Production Engineering, M.Tech in Radio Frequency Design & Technology, M.Tech in Rock Engineering & Underground Structures, M.Tech in Solid State Materials, M.Tech in Structural Engineering, M.Tech in Telecommunication Technology & Management, M.Tech in Textile Chemical Processing, M.Tech in Textile Engineering, M.Tech in Thermal Engineering, M.Tech in Transportation Engineering, M.Tech in VLSI Design Tools & Technology, M.Tech in Water Resources Engineering, M.Sc in Chemistry, M.Sc in Cognitive Science, M.Sc in Economics, M.Sc in Mathematics, M.Sc in Physics, M.S.(R) in Machine Intelligence & Data Science, M.S.(R) in Applied Mechanics, M.S.(R) in Biochemical Engineering and Biotechnology, M.S.(R) in Biological Sciences, M.S.(R) in Telecommunication Technology and Management, B.Tech in Civil Engineering and M.Tech in Geotechnical and Geoenvironmental Engineering, B.Tech in Civil Engineering and M.Tech in Water Resources Engineering, B.Tech in Civil Engineering and M.Tech in Structural Engineering, B.Tech in Civil Engineering and M.Tech in Construction Engineering & Management, M.S.(R) in Civil Engineering, M.S.(R) in Chemical Engineering, B.Tech in Textile Engineering and M.Tech in Computer Science & Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering (Power and Automation) and M.Tech in Computer Science & Engineering, B.Tech in Biochemical Engineering & Biotechnology and M.Tech in Computer Science & Engineering, M.S.(R) in Computer Science & Engineering, Master of Design in Industrial Design, M.S.(R) in Electrical Engineering, M.S.(R) in Energy Science and Engineering, M.S.(R) in Sensors, Instrumentation and Cyber-physical System Engineering, M.S.(R) in VLSI Design Tools and Technology, B.Tech in Mechanical Engineering and M.Tech in Thermal Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, M.S.(R) in Mechanical Engineering, M.S.(R) in Materials Science and Engineering, Post Graduate Diploma for Visionary Leadership in Manufacturing, Masters in Public Policy, M.S.(R) in Information Technology