

Job Notification Form, IIT Delhi

Company Overview

Name: Honda R&D Co., Ltd.
Website: <http://www.honda.co.jp/RandD/>
Company Type: MNC (Foreign Origin)
Description: NA

Job Details

Designation: Data Scientist/ AI Engineer / Algorithm Designer

Type: Information Technology

Place of Posting: Roppongi, Tokyo, Japan

Job Details: In order to prepare for the coming age, where usage of car will change by spreading CASE, Honda R&D 8G1 division is committed to develop on-board AI assistant to provide personalized information properly and timely in-vehicle situation.

We already have developed system to collect many kind of data from connected car like moving and operation history from over million cars and plan to collect dialogue history with on-board AI assistant. We analyze and utilize the big data to develop user profiling technology by deep insight for human. By this technology, we provide personalized service in car.

Example of profiles:

Position Summary 1

In order to improve the users' comfortability of mobility service, on-board AI assistant will be a solution for it by understanding the driver's mental work load and switching the services and functions adequately.

In our laboratory, we are developing driver's mental work load measuring and predicting technique with utilizing a drivers' voice, conversations, monitoring images and vehicle maneuvering logs from actual experimental driving. We will clarify the methodology and applicable use cases for the developing technology, and determine the developing plan for on-board application development.

1st year:

Classify the driver's mental work load for some typical driving situations, and investigate the sensing devices and multi-modal technology which is available for them.

2nd year-3rd year:

With considering sensor fusion, multi-modal and time series analysis technology as reference technologies, develop machine learning model for driver's mental work load measuring and predicting to verify the applicability and availability for actual tasks. By analyzing the test results, clarify the methodology and applicable use cases for the developing technology, and determine the developing plan for on-board application development.

Minimum / Preferred Requirements:

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Must

Experience for Programming with C, C++, C# or Python

Experience for Programming with DNN framework such as Caffe, TensorFlow, Pytorch, Chainer so on

Experience for application software design and development

Communication skill with English

Want

Data analysis technology and knowledge for image, voice, language or human vital data

(at least two fields)

Data processing experience for time series sensor data of actual mechanical system.

Position Summary 2

You will work to promote R&D to understand human behavior and characteristic related to with mobility. We hope you to promote cooperation with universities and start-up companies.

We consider your specialty to choose research theme. The following are examples.

Example

?Develop prediction model of moving action by applying machines learning technologies like DNN.

?Develop driving feature model by using driving operation history.

?Develop technology to generate knowledge graph for destination search automatically and apply to specific person.

?Develop preference extraction technology by voice dialogue history and SNS.

1st -2nd year: You will set your technical problem and choose optimal approach by state-of-the art technology like DNN, and promote to confirm the approach by real data making the most of cooperation with universities and start-up companies.

3rd -5th year: You will adopt the technology for mobility, and solve the real world and system problem for mass production.

Minimum / Preferred Requirements:

Must

Experience for data analysis and developing algorithm with R, Python.

Experience for Programming machine learning algorithm.

Experience for statistical analysis.

Communication skill with English.

Want

Experience for developing a kind of language or knowledge system like recommender system.

Experience to participate predictive modeling competition like Kaggle.

Experience for application software design and development with C, C++ or Java.

Experience for developing open source software.

International: Yes

Joining By: October 1

Salary Details

CTC: 8200000 JPY Per Annum

Gross: 7200000 JPY Per Annum

CTC Breakup: Base + House Rent + Healthcare + Allowance (food & commute) + Japanese Training

Breakup of Gross: Work's + Bonus + Profit share + Provident fund + PF

Perks / Bonus: We follow a concept of 'supreme bonus':
After every 6 months of evaluation:
1. Output meets the assignments: no incentive (CTC: JPY 8200000)
2. Outstanding outputs: additional bonus of JPY 560000 (CTC: JPY 8200000+560000)
3. Supreme outputs: additional bonus of JPY 1120000 (CTC: JPY 8200000+1120000)
So maximum CTC a candidate can get after 1 year depending upon his performance is JPY 8200000+ 1120000+ 1120000 = JPY 10740000

Selection Process

Resume Shortlist: Yes

Written Test: No

Online Test: Yes

Group Discussion: No

Medical Test: No

Personal Interview: Yes

No. of Rounds: 2

No. of Offers: 1

Minimum CGPA:

Eligibility

Recruiting PHDs: No

Eligible Departments: B.Tech in Biochemical Engineering & Biotechnology, B.Tech in Civil Engineering, B.Tech in Chemical Engineering, B.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering, B.Tech in Electrical Engineering (Power and Automation), B.Tech in Mechanical Engineering, B.Tech in Production & Industrial Engineering, B.Tech in Mathematics & Computing, B.Tech in Engineering Physics, 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, B.Tech in Production & Industrial Engineering and M.Tech in Production Engineering, B.Tech in Mechanical Engineering and M.Tech in Mechanical Design, B.Tech in Mechanical Engineering and M.Tech in Applied Mechanics, B.Tech in Production & Industrial Engineering and M.Tech in Mechanical Design, B.Tech in Textile Engineering and M.Tech in Computer Science & Engineering, B.Tech in Chemical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Production & Industrial Engineering and M.Tech in Computer Science & Engineering, B.Tech in Civil Engineering and M.Tech in Structural Engineering, B.Tech in Civil Engineering and M.Tech in Construction

Engineering & Management, B.Tech in Engineering Physics and M.Tech in Computer Science & Engineering B.Tech in Mechanical Engineering and M.Tech in Thermal Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, M.Tech in Chemical Engineering, M.Tech in Molecular Engineering: Chemical Synthesis & Analysis, M.Tech in Geotechnical and Geoenvironmental Engineering, M.Tech in Rock Engineering & Underground Structures, M.Tech in Structure Engineering, M.Tech in Water Resources Engineering, M.Tech in Construction Engineering & Management, M.Tech in Environmental Engineering & Management, M.Tech in Transportation Engineering, M.Tech in Computer Science & Engineering, M.Tech in Applied Optics, M.Tech in Solid State Materials, M.Tech in Fibre Science & Technology, M.Tech in Textile Engineering, M.Tech in Textile Chemical Processing, M.Tech in Atmospheric-Oceanic Science and Technology, M.Tech in Biomedical Engineering, Master of Design in Industrial Design, M.Tech in Communications Engineering, M.Tech in Computer Technology, M.Tech in Control & Automation, M.Tech in Integrated Electronics & Circuits, M.Tech in Power Electronics, Electrical Machines & Drives, M.Tech in Power Systems, M.Tech in Radio Frequency Design & Technology, M.Tech in Mechanical Design, M.Tech in Industrial Engineering, M.Tech in Production Engineering, M.Tech in Thermal Engineering, M.Tech in Engineering Analysis & Design, M.Tech in Industrial Tribology & Maintenance Engineering, M.Tech in Energy Studies, M.Tech in Instrument Technology, M.Tech in Optoelectronics & Optical Communication, M.Tech in Polymer Science & Technology, M.Tech in Telecommunication Technology & Management, M.Tech in VLSI Design Tools & Technology, M.S.(R) in Biochemical Engineering and Biotechnology, M.S.(R) in Chemical Engineering, M.S.(R) in Civil Engineering, M.S.(R) in Computer Science & Engineering, M.S.(R) in Telecommunication Technology and Management, M.S.(R) in Information Technology, M.S.(R) in Biological Sciences, M.S.(R) in Applied Mechanics, M.S.(R) in Mechanical Engineering, M.S.(R) in Electrical Engineering, M.Sc in Chemistry, M.Sc in Mathematics, M.Sc in Physics, Doctor of Philosophy