



Innovation through Science

Research Scientist *m/f/d*

Future Transportation and Personal Mobility System Modelling

The Honda Research Institute Europe is working at the cutting edge of scientific research towards artificial intelligence, robotics, and intelligent systems.

Our vision is a society in which humans, intelligent cyber-physical systems, and nature raise and support each other. The successful cooperation between humans, robots, and intelligent systems is key to a prospering society.

We are looking for highly motivated and talented researchers sharing our spirit of turning pioneering scientific research into groundbreaking innovations. If you want to contribute your ideas, for making this reality, join us at our institute at Offenbach am Main, Germany.

The background

Innovations in personal transportation involve new and smarter sources of energy, revolutionary modes of transportation and new technologies in the available infrastructure. Electrification of systems, hydrogen powered devices, autonomous aerial vehicles (AAVs) and Smart Cities are only some examples.

In order to optimally utilize these current and future innovations, new and holistic mobility concepts are necessary to generate a benefit for the individual traveler as well as for the society by forming seamless multi-modal concepts for advanced personal mobility.

A key for the understanding and the realization of the highly complex overall systems, which is rich in emergent properties, is the modelling in a framework of systems engineering including prediction and optimization.

Your responsibilities

- Research new system architecture concepts by the definition and implementation of connected multi-modal transportation systems models, their analysis and improvement based on large scale agent-based transport simulations and city digital twins
- Technological contributions in the field of model-based system engineering for smart cities, interactive many criteria simulation and engineering data analytics
- Find new solutions to problems like the determination of efficient system topologies, dynamic scheduling, resilience and robustness of the overall system, etc.
- Publication and presentation of research results at top ranking conferences and in journals

Your profile

- A Doctoral degree or excellent Master of Science degree in Computer Science, Aerospace Technology, Mathematics, Informatics or related fields
- A proven track record of excellent research and the ability to define a research agenda contributing to our vision
- Experience or strong interest in systems engineering, mobility concepts, artificial intelligence, agent-based simulation and system modelling
- Profound programming skills in one of the following languages: C, C++, Python

Take the initiative and become part of our international team.

We look forward to hearing from you.

To make initial contact, please submit your application mentioning your earliest starting date and your salary expectations online at:

honda.pme-net.de

or send it to:

PME – Personal- und Managemententwicklung · Horst Mangold
Postfach 1334 · 55206 Ingelheim / Germany

Do you need more information? Mr Mangold will gladly assist and is available on +49 (0) 6132 899 040, including in the evening.