



**Innovation through Science**

## **Research Scientist m/f/d Embodied AI**

The Honda Research Institute Europe is working at the cutting edge of scientific research in the areas of artificial intelligence (AI), robotics and intelligent systems.

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

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

### **The background**

Innovations in cyber-physical systems like collaborative robotics or remote presence systems pose a wide range of scientific and technological challenges. The environment and the interacting partners need to be perceived, understood and predicted. Trustworthy and meaningful behaviors need to be generated based on context and knowledge. Tackling those challenges is subject to current research in academia and industry. Many of these topics require a strong background in AI and machine learning methods with a focus on embodied cognition and interaction.

Specific topics we are currently exploring include situation awareness, trust management, cooperative behavior generation, multi-agent coordination, cognitive systems modelling, human-robot interaction, intention estimation and multi-embodiment systems. In this context, we are looking for a person with broad interest and a solid methodological foundation who is eager to take up challenges in new fields.

### **Your responsibilities**

- Research into new methods and concepts in embodied AI systems like cooperative behavior generation, multi-agent coordination, cognitive systems modeling, multi-embodiment systems, situation awareness, trust management or intention
- Development and evaluation of metrics to verify quality and scope of proposed methods and improve them based on interactive studies
- Design, development and integration of software modules and systems necessary to realize research prototypes with technology readiness levels (TRL) ranging from TRL 1 up to TRL 5
- Publication and presentation of research results at top-ranking conferences and in journals

### **Your profile**

- A PhD or excellent Master of Science degree with experience in a related field, like computer science, cognitive science, developmental robotics or systems engineering
- PhDs should have a proven track record of excellent research and the ability to expand the scientific field in line with the strategic institute direction
- Applicants holding a Master's degree also have the option to pursue a PhD in cooperation with academic partner institutions
- Experience or strong interest in embodied systems like robots or vehicles and a strong drive to explore new directions for innovations
- Strong scientific programming skills in one of the following languages: C, C++, Python
- Experience in open-source AI environments
- Openness to expansion of competencies in professional software engineering tools and methodologies

### **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](http://honda.pme-net.de)

Do you need more information? Mr. Mangold would be glad to help. He is available at +49 (0) 6132 899 040, including evenings.