Innovation through Science

Research Scientist m/f/d
IT security and privacy-preserving computation

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

Data is a valuable good in optimization and personalization to create high-quality services for everyone. Therefore, privacy preserving computation technologies as well as secure software engineering processes are needed to provide an ecosystem maintaining the privacy and security of the users. With cryptographic approaches, data of the users can remain encrypted and at the same time allow legitimate algorithms to leverage the data. Automated threat modeling and fuzzing facilitate systematic identification of vulnerabilities in software.

While several technologies exist for this purpose, strong challenges are still to be overcome in their application in a productive environment.

Your responsibilities

- Scientific research and technological contributions in the fields of IT security, in specific in the domains of privacy-preserving computation, secure software engineering and secure systems
- Development of new algorithms and concepts for scalable multiparty-computation architectures, as well as strategies for systematic vulnerability detection through fuzzing and automated threat modeling
- Contribution to the implementation and validation of interactive prototypes in real-world scenarios for robots, vehicles or intelligent agents
- Publication and presentation of research results at top ranking conferences and journals

Your profile

- An excellent Master of Science degree in Computer Science, Mathematics or related fields
- Profound programming skills
- Prior experience with data security or privacy are advantageous
- Capability to work independently

Our strengths

- Open research culture and collaborations with many national and international universities
- Exciting combination of basic research with applied research
- Participation in international conferences and in the HRI-EU European Graduate Network
- Applicants have the possibility to pursue a PhD in cooperation with academic partner institutions
- Honda Car Leasing Program with attractive conditions

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.

www.honda-ri.de