May 16, 2017

Honda Begins Joint Research with Boston University in Information Security for Artificial Intelligence

Honda Research Institute (HRI), a Honda R&D subsidiary, and Boston University have agreed to begin joint research in the area of data security and privacy for artificial intelligence (AI) research.

Since its foundation, with a passion to provide people everywhere with the joy of expanding their life's potential, Honda has been striving to evolve mobility and improve the daily lives of people all around the world with its products including motorcycles, automobiles and power products.

In the midst of this pursuit, and with the advancement of digital technologies including AI technologies, Honda began to see a growing possibility to create value in a wider range of fields beyond its current businesses. Responding to such changes in the business environment, in addition to its continuous pursuit of the art of making things (*Mono-zukuri*), Honda will take on new challenges in enhancing brand story creation about the new value and experiences (*Koto-zukuri*) Honda can provide through the art of making things. In this way, Honda will strive to make people's lives more enjoyable using AI technology.

Honda will develop Cooperative Intelligence: AI that cooperates with people which will 1) empower: expands the potential of people, 2) share experience: accommodate and grow together with people, 3) empathize: be capable of understanding and relating to the emotions of people.

In order to enable AI to cooperate with people, personal information about the users must be collected and analyzed. Using sophisticated information security, we must protect this information.

To accelerate its research in the area of information security, Honda has chosen the Rafik B. Hariri Institute for Computing and Computational Science & Engineering of Boston University as one strategic partner for joint research collaboration. To coordinate and structure the collaboration, an oversight committee has been established, consisting of the members of Boston University and Honda, including Dr. Azer Bestavros, Distinguished Professor of Computer Science Department at Boston University and Founding Director of Boston University Hariri Institute for Computing, and Dr. Bernhard Sendhoff, Head of Global Operations of HRI and President of HRI Europe.

A first research project will investigate data privacy control; using a technology called secure multi party computation[*].Currently, personalized services such as recommender systems have become common in our daily lives. These systems typically share personal data of users, often without their knowledge and control.
Our goal is to create data security technologies that enable users to control which data can be shared with systems and which cannot. This project officially started on May 1, 2017.

Honda is envisioning a future society where mobility products and robots equipped with secure Cooperative Intelligence are highly capable and at the same time trusted devices that play an important and joyful part in peoples' everyday lives. In order to continue providing people everywhere with the joy of expanding their life's potential, Honda will continue to strive to create more and more innovations.

■ **Comments by Jean Morrison, University Provost and Chief Academic Officer**
"Boston University is delighted to be entering this important and promising partnership with the Honda Research Institute. For a global research university of BU's scale, privacy is an area of study that uniquely connects so many diverse disciplines, from computer and data sciences to the social sciences, humanities, and healthcare, making it a great example of convergent research. We believe this partnership will be a model for future academic-industrial collaborations, opening exciting new opportunities for research that benefit both institutions and advance societal good."

■ **Comments by Dr. Bernhard Sendhoff**
"The synergy between Boston University's world-class research in data security and privacy and our approach and our experience in Cooperative Intelligence will enable significant progress to provide people with both confidence and trust in intelligent systems of the future."

<About Boston University>
Established: 1839
Location: Massachusetts, U.S.A.
Provost: Dr. Jean Morrison, University Provost and Chief Academic Officer

<About Honda Research Institute>
Established: 2003
Location: Wako, Saitama, Japan
                 Offenbach am Main, Hessen, Germany
                 Mountain view, California, U.S.A.
Capitalization ratio: 100% Honda R&D Co., Ltd.

* One kind of cryptography. It conducts computation with the data kept private.

Publicity materials relating to this press release are available at the following URL:
http://www.hondanews.info/en/
(The site is intended exclusively for the use of journalists.)