

### **Honda Begins Joint Research on AI Technologies with the Indian Institutes of Technology in Delhi and Bombay to Further Advance Honda CI (Cooperative Intelligence)**

TOKYO, Japan, September 11, 2024 – Honda\*<sup>1</sup> today announced that it has begun joint research on AI technologies with the Indian Institutes of Technology (IITs), more specifically, Indian Institute of Technology Delhi (IIT Delhi) and Indian Institute of Technology Bombay (IIT Bombay), to further advance Honda CI (Cooperative Intelligence, CI<sup>2</sup>), original Honda AI that enables mutual understanding between machines and people.

The IITs are a home to a large number of excellent researchers and engineers, and through the joint research with those institutes, Honda will strive to advance the underlying technologies of CI, with an eye toward the future applications for technologies that reduce traffic collisions and enable automated driving.



Atsushi Ogawa, Honda R&D Managing Officer  
Takuya Tsumura, President, and CEO, Honda Cars India Ltd.  
Prof. Rangan Banerjee, Director, IIT Delhi  
Prof. Ambuj Sagar, Deputy Director, IIT Delhi



Prof. Milind Atrey, Deputy Director, IIT Bombay  
Prof. K V Krishna Rao, Deputy Director, IIT Bombay  
Atsushi Ogawa, Honda R&D Managing Officer  
Takuya Tsumura, President, and CEO, Honda Cars India Ltd.

Honda has been working on research and development of CI with the aim to realize a society where each and every person can enjoy the joy and freedom of mobility. To this end, Honda is trying to make the mobility of people and things ubiquitous (whenever, wherever, to any destination), collision-free and stress-free. Honda is currently conducting technology demonstrations as a proof of concept of its CI-powered micro-mobility vehicle/robot in Joso City, Ibaraki Prefecture, Japan.

Aiming to achieve further advancement of CI, Honda and IITs have set joint research themes such as recognition of the surrounding environment and cultivation of cooperative behavior, and will conduct joint research and development while utilizing the cutting-edge AI technologies. Moreover, for each research theme, Honda associates and IIT professors will jointly engage with IIT students for planning, designing, developing and testing technologies which work beyond the confines of the laboratory and thereby proceed with the research and development more flexibly and with a high degree of freedom. This will enable Honda and IITs to work in a more flexible environment with deeper exchange of academic and industry insights.

In addition, as part of this joint research, Honda with the help of IITs is aiming to conduct verification of driving assistance and automated driving technologies in the suburbs of Delhi and in Mumbai. Due to numerous variations in the road systems and a large number of road users, India has a complex traffic environment where situations that occur frequently are difficult for AI to predict. By conducting technology verification in such a technically challenging environment, Honda and IITs will refine the underlying technologies of CI and strive to apply them to future driver assistance and automated driving technologies in various regions of the world, including India.

Honda has been actively hiring IIT graduates since 2019, and many of them are now playing key roles in the areas of mobility intelligence, including the research and development of CI. By pursuing joint research programs with IIT professors and students specializing in cutting-edge AI and automated driving technologies, Honda will accelerate research and development of CI and also contribute to the fostering of researchers who will play a role in future AI research by providing them with practical research opportunities.

\*1 Honda Cars India Limited (HCIL), a Honda subsidiary in India, will sign a joint research contract with IITs. Engineers from both HCIL and Honda R&D Co., Ltd. a R&D subsidiary of Honda, will participate in the joint research.

\*2 A type of artificial intelligence that supports the user while cooperating with the user and people around them by communicating with gestures/behaviors and words. Achieving mutual understanding and cooperation between people and systems with CI will enable them to coexist in various situations including complex traffic environments.

## <About Indian Institutes of Technology (IITs)>

The Indian Institutes of Technology (IITs) are national institutes leading the world in cutting-edge engineering and science and technology research. The IITs comprise 23 institutions, each of which is independently organized contributing to advanced technology and research. Indian Institute of Technology Delhi (IIT Delhi), located in Delhi, the capital of India, is home to high end laboratories and centers of excellence trying to tackle the most challenging problems of the world ranging from collaborative robots to carbon neutrality. The Indian Institute of Technology Bombay located in Mumbai, the financial capital of India, houses the Centre for Machine Intelligence and Data Science (C-MInDS) a multi-disciplinary collaborative effort to tackle challenges pertaining to the frontiers of AI and Machine Learning. Both IIT Delhi and IIT Bombay have been recognized as Institutes of Eminence by the government of India.

### ■ Indian Institute of Technology Delhi (IIT Delhi)

- Establishment: 1961
- Location: Delhi
- Director: Prof. Rangan Banerjee

### ■ Indian Institute of Technology Bombay (IIT Bombay)

- Establishment: 1958
- Location: Mumbai, Maharashtra
- Director: Prof. Shireesh Kedare