

Amazon and IIT Bombay launch multiyear collaboration

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Initiative will advance artificial intelligence and machine learning research within speech, language, and multimodal AI domains.

Bangalore, India— 27 March 2023: -Amazon and the Indian Institute of Technology—Bombay (IIT Bombay) today announced the creation of the Amazon IIT—Bombay Al-ML Initiative.

The Amazon IIT–Bombay AI-ML initiative is a multiyear collaboration that will fund research projects, PhD fellowships, and community events, such as research symposia. The initiative, which will be housed in the IIT Bombay Department of Computer Science and Engineering, will advance artificial intelligence (AI) and machine learning (ML) within speech, language and multimodal AI domains.

"We at IIT Bombay are committed to our mission of translating knowledge and research into revolutionary technologies," said Subhasis Chaudhuri, director at IIT Bombay. "Our top research minds have always attracted the attention of companies interested in scientific study. With industry collaborators like Amazon who have a deep sense of technology and global reach, we hope to be able to expedite the deployment of technologies/products in the field of AI-ML."

IIT Bombay ranks among the top engineering institutes in India, and is known for producing cutting-edge research in AI and ML. The Computer Science and Engineering department is one of the largest on the subcontinent, with 45 full-time faculty members. Amazon's sponsorship of the Amazon IIT—Bombay AI-ML initiative reflects its dedication to addressing complex research challenges in AI through deep collaboration with outstanding centers of academic research.

"We are glad that Amazon, through this initiative, is entering India within the realm of academic-industrial collaboration with IIT Bombay," said Milind Atrey, IIT Bombay dean of Research and Development. "This collaboration will foster innovation in three ways, through community projects, research projects, and fellowships, which will indeed spur development in AI and ML domains, as well as other areas, as the relationship progresses."

"Amazon's growing research and development operations in India have powered engagement with Alexa users in Hindi and Indic languages and their Al/ML innovations have delivered increasingly delightful shopping experiences," said Rohit Prasad, Alexa senior vice president and head scientist. "This investment at one of the world's premier academic institutions will bring together Amazon scientists and IIT Bombay students/faculty, leveraging India's multilinguality as a learning lab, to develop new Al systems that can learn and adapt to different languages, accents and dialects. These efforts will help advance the technology fundamental to the future of conversational Al."

Amazon and IIT Bombay have existing ties, including through the Amazon Research Awards program. The most recent award was granted in 2022 to Preethi Jyothi, associate professor of computer science and engineering at IIT-Bombay, who was recognized for her work on fairness in speech recognition.

Amazon in India

Amazon has an extensive presence in India, serving some 600 million people in the country today. That presence includes Alexa AI research offices in Bengaluru, where researchers are solving technically challenging problems related to the needs of people in India who speak more than 22 official languages with over 19,500 dialects; and Hyderabad, where scientists are applying machine learning techniques to information retrieval, forecasting, delivery planning, and reducing packaging costs.

Alexa scientists in India have been at the forefront of research on multilingual machine learning – from speech processing and natural language understanding to voice generation. In fact, the Alexa team in India launched a single machine learning model that can understand English, Hindi, or a mix of both. Further innovations from the India team will be leveraged globally to enable Alexa to better understand customer requests across multiple different languages.

In addition to the Amazon IIT–Bombay Al-ML Initiative, Amazon sponsors a free annual ML Summer School, which is offered to engineering students in India graduating from Bachelor's, Master's, or PhD programs. Over the course of four weeks, students from all over the country gather to learn the basics of ML.

The summer school and this collaboration mark an extension of Amazon's ongoing efforts to accelerate the growth of technological innovation in India.

About Amazon

Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Amazon strives to be Earth's Most Customer-Centric Company, Earth's Best Employer, and Earth's Safest Place to Work. Customer reviews, 1-Click shopping, personalised recommendations, Prime, Fulfillment by Amazon, AWS, Kindle Direct Publishing, Kindle, Fire TV, Amazon Echo, and Alexa are some of the things pioneered by Amazon. For more information, visit www.aboutamazon.in and follow @AmazonNews_IN.