

MoU signed to adopt Amazon Web Services Educate program and establish an AI and Cloud Computing Research Lab in IIT (BHU), Varanasi

Indian Institute of Technology (Banaras Hindu University) gets Future-Ready with Artificial Intelligence and Machine Learning Skills

New Delhi, India – June 19, 2018: The Indian Institute of Technology – Banaras Hindu University (IIT-BHU) and Amazon Internet Services Private Limited (AISPL) today signed a Memorandum of Understanding (MoU) to develop cloud-ready job skills by providing access to the Amazon Web Services (AWS) Educate program, and to help establish an artificial Intelligence (AI) and machine learning (ML) Cloud Research Lab. At this occasion Union HRD Minister Shri. Prakash Javadekar told that Amazon is joining hands with IIT (BHU) for giving essentially free services in cloud computing, data sets and new technologies which will empower our students and faculty to do better and focussed research. It can save cost and time and come out with good research that will benefit all sections of society.

The primary vision of this collaboration was to develop cloud-ready job skills by deploying a range of education, training and certification programs to accelerate cloud-related learning and development, with focus around Artificial Intelligence (AI) & Machine Learning (ML). Cloud Research Lab will provide students with opportunities to use AWS Cloud technology to pursue research initiatives that focus on AI and ML innovation for India.

The MoU was signed by Prof. Rajeev Sangal, Director in presence of MHRD minister Hon'ble Shri. Prakash Javadekar. On this occasion Prof. K.K. Shukla, Dean, Faculty Affair and Dr. S.P. Mathur, Registrar were present.

Why this Collaboration

According to an Accenture report titled, “Rewire for Growth”, AI has the potential to add nearly US \$1 trillion to India’s economy by 2035¹. India, as the fastest growing economy and with the second largest population in the world, has a significant stake in the AI revolution which needs to be implemented and encouraged in the areas of health, education, environment, infrastructure, cyber security, and various other sectors. Delivering home-grown pioneering technological AI

¹ Accenture report “Rewire for Growth, December 21, 2017

solutions and simultaneously building the foundational R&D capabilities will enable Indian businesses to innovate with #AI4India.

Objectives of the Collaboration

Amazon affiliate and IIT (BHU) Varanasi will collaborate to identify opportunities to provide trainees access to the AWS Educate program. The adoption of the AWS Educate will give trainees access to resources needed to accelerate cloud-related learning endeavors, including AWS Promotional Credits for hands-on experience with AWS technology, training, content, career pathways and the AWS Educate job board.

AWS Educate provides four pillars of support — grants of AWS credits, training, content, and collaboration. The content available on AWS Educate is provided by both AWS and a passionate community of educators from leading institutions around the globe.

Approach and targeted outcome

Both parties will come together for the strategic relationship to provide multifaceted, collaborative, strategic initiatives that are based on mutual benefit. IIT (BHU) Varanasi would target to sign-up an estimate of 6,000 trainees to the AWS Educate program. Amazon affiliate would assist IIT (BHU) Varanasi to setup a cloud & research lab on campus, in the area of Artificial Intelligence & Machine Learning with a focus on innovation for India.

Benefits of AWS Educate program

What do students and educators get?

- Under the MoU agreement, IIT-BHU gains access to the resources in the Amazon Web Services (AWS) Educate program and curriculum designed for higher education institutions to incorporate in to their courses.
- This collaboration will help accelerate cloud-related technical expertise for students and boost their readiness as they prepare to undertake the industry-recognized certification. AWS offers over 125 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management ; and these features will be available to IIT-BHU faculty, researchers and students to develop innovative solutions for India

- AWS Credits -- Grants to use Amazon Web Services in their courses and projects. Promotional credits upto \$100 for students and upto \$200 for educators
- Content -- Free content to embed in courses or to gain additional knowledge
- Training – Access to free and discounted AWS Training resources
- Collaboration – Online and, in some cases, in-person collaboration and networking around the cloud. Educators gain access to our newly-created Educator Collaboration Portal.
- On successful completion of a career pathway and submission of project, students are eligible for an AWS Educate certificate, provided they secure a minimum of 80% marks
- Educate job board –On completion of a course module, trainees would be able to search for relevant jobs on the job board of the program

View/Opinion of the Institutional Heads about the Collaboration

Professor Rajeev Sangal, Director, IIT-BHU: As Chairman for the Committee on Leveraging AI for National Missions in Key Sectors, I am acutely aware of the critical need to develop a proficient and robust talent base in the country in core areas such as cloud computing, artificial intelligence, and machine learning applied to problems in various sectors. As IITs are the premier engineering institutes in India, we have an obligation to ensure that our brightest and the most talented students in the country have easy access to best-in-class technology. This MoU agreement helps our students develop technical proficiency with AWS Cloud skills and its advanced technologies in artificial Intelligence and machine learning before they graduate.

Rahul Sharma, President - Public Sector, Amazon Internet Services Private Limited: With the resources and tools provided by the global AWS Educate program, the educators and students in IIT-BHU gain access to the latest and most innovative AWS Cloud technologies, along with open course content contributed by other top education institutions around the world. This helps both educators and students in keeping close to the forefront of technology advancement and industry requirements. We are pleased to work with IIT BHU to build a strong foundation of students skilled in using AWS Cloud, including advanced technologies such as AI, ML, serverless computing, big data analysis, Internet of Things, and many others. This helps nurture young talent in their quest for innovation, which is a critical cornerstone in advancing the economic growth for India.