Topics:

Towards Education Re-conceptualization using Artificial Intelligence

Scope:

Recently, the era of Artificial Intelligence (AI) has stepped forward the Computer Science towards the Intelligent Science with the emerging technologies such as Cognitive Computing, Natural Language Processing, Deep Learning, Big Data and many more. The key concept is how to process huge amount of data intelligently and take the autonomous intellectual decisions. AI has already influenced various sectors of our life such as health, agriculture, entertainment, transportation, education, security, etc. It is asserted by practitioners/ researchers that no domain will be left immaculate by the impact of AI in the coming years.

Education is one of the sectors that can be re-conceptualized with the evolving intelligence of computers by providing the intelligent tools to mentors and mentees. This would help the mentors to improve their teaching methodologies and assessment strategies. As a result, mentees learning capability and performance would also be enhanced. Some universities are already using AI based tools for betterment of education sector. Nevertheless, researchers are still working towards the development of better and cost-effective solutions.

AI is widely used for computer science and mathematics people. Though, it doesn't mean that it is only for them. Other streams can also be enhanced with the help of AI techniques. For instance, AI enabled virtual labs can be used for Civil Engineering students for 3D modelling of buildings and estimating the requirement of the materials or predicting the damage in advance. Moreover, AI involvement in Chemical Engineering can help the students in development of new chemical or formula without wasting much time. AI based simulation tools can help Biotechnology students to see the chemical reaction of different salts with proteins without injecting them in the human body. Hence, there is a high need to re-imagine engineering education in the AI era.

So, we invite researchers from various communities who can throw a light on various applications which includes (but not limited to) assessment tools, performance analysis, personalized learning portals, automatic evaluation, incremental learning, adaptive learning, smart virtual classrooms, affective tutor, virtual labs, simulators, 3D modeling tools and virtual reality tools.

Guest Editors:

Dr. Shikha Jain, Assistant Professor, Jaypee Institute of Information Technology, Noida. Shi_81@rediffmail.com, shikha.jain@jiit.ac.in

Dr. Kavita Pandey, Assistant Professor, Jaypee Institute of Information Technology, Noida. kavita.pandey@jiit.ac.in