

**SAKTHI INSTITUTE OF TEACHER
EDUCATION AND RESEARCH**

&

**SAKTHI COLLEGE OF
EDUCATION FOR WOMEN**

(Affiliated to Tamil Nadu Teachers Education University)

(Accredited by NAAC with 'B' Grade)

Palakkanuthu (Po), Dindigul (Dt.), Tamilnadu-624619

Jointly Organized

Two Day International Conference on

**ARTIFICIAL INTELLIGENCE IN
HIGHER EDUCATION: TRENDS &
PROSPECTS (AIHETP-2024)**

8th & 9th February 2024

Hybrid mode

By

SAKTHI GROUP OF INSTITUTIONS

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CHAIRMAN MESSAGE



It gives me immense pleasure that the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women has jointly organizing the International Conference on Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)" on 8th and 9th February 2024 at Sakthi Institute of Teacher Education and Research, Palakkanuthu, Oddanchatram, Dindigul.

The central theme of the conference is "Artificial Intelligence". AIHETP-2024 provides an opportunity for meeting of International Researchers, Social Scientist and Specialist in the various research and development field of Social Sciences, Engineering and Technology. The conference offers a premise for global experts to gather and interact intensively on the topics of Paradigms Shipt in Artificial Intelligence for Education, Cognitive Neuroscience, Virtual Reality, and Artificial Intelligence in Special Education. I hope eminent speakers will cover the theme Artificial Intelligence from different perspectives. I am privileged to say that this conference will definitely offer suitable solutions to the global issues. The success of this conference is solely on the dedication and efforts of innumerable people who started working on the preparations for almost a year in many ways to make this Conference become a reality. Eventually I express my special thanks and appreciation to all. I wish AIHTEP-2024, all the best for its success. I wish to congratulate the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women for initiative to organize this international conference.

I take this opportunity to congratulate the organizing secretaries Dr. M. Mani & Dr. K. Kannadasan and the convener Dr. C. Ashok Kumar of the conference all success in the present and future endeavours.

Dr. K. Vembanan, M.B.B.S., M.S
Chairman
Sakthi group of institutions, Dindigul

PRINCIPAL MESSAGE



I am delighted to know that the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women ventured in jointly organizing the International Conference on Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)" on 8th and 9th February 2024.

The conference intends to bring together researchers, social scientists and engineers from different disciplines to discuss concerns related to integration of Artificial Intelligence in Science, Social Science, Engineering and Technology. I take this opportunity to welcome all the delicate of the conference on behalf of whole AIHETP-2024 team, I would like to thank all the authors and keynote speakers for their support and co-operation. The rapid development in technologies and changes in lifestyle impose various issues in many countries. The conference AIHETP-2024 has been crafted to challenge the hurdles and we are fortunate to have leading speakers to share their experience and perspectives to achieve smart solutions through their innovation. I hope that the conference serve as a locus for interdisciplinary, a space for discourse and collaboration.

I am very much pleased to note that a large number of Academicians, Research Scholars, M.Ed., and B.Ed., Post-Graduate from across the nation contribute their views and their sharing would definitely enlighten the audience.

The organizing secretaries Dr. M. Mani & Dr. K. Kannadasan deserve appreciation for associating the Sakthi Institute of Teacher Education & Research in this useful venture. I wish the conference a very grand success and let the participants have a feeling of strong academic enrichment at the conference.

(Dr. C. ASHOK KUMAR)

Principal

Sakthi Institute of Teacher Education & Research
Dindigul- 624619.



UGC-Malaviya Mission Teacher Training Centre

(Formerly UGC - Human Resource Development Centre)

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ज्ञान - विज्ञानं विमुक्तये

Dr. S. SENTHILNATHAN
Director

MESSAGE

It is indeed with a great sense of pleasure that I learn about the International Conference on "Artificial Intelligence in Higher Education: Trends and Prospects", being jointly organized by Sakthi Institute of Teacher Education and Research and Sakthi College of Education for Women on 8th and 9th Feb. 2024. The theme of the Conference is not only vital, but also timely. Higher education is in the era of digital transformation. Learning technologies and digital platforms are no longer an afterthought; they are critical for teaching and learning. The COVID-19 pandemic served as a catalyst for this digital transformation, forcing colleges, universities, instructors, and students to shift online rapidly. Digital learning in the higher education context is all about leveraging digital technologies to enable major educational improvements, enhance learner and instructor experiences, and create new instructional models through policies, planning, partnerships, and support. It is driven by and built on digital technologies. It changes the educational landscape significantly. Keeping up with the digital transformation helps higher education institutions operate effectively, stay competitive in an increasingly digital world, and prepare learners for the digital workplace. In this context, a platform for discussion Artificial Intelligence in Education is essential, since the potential of using artificial intelligence in education to enhance learning, assist teachers and fuel more effective individualized learning is exciting, but also a bit daunting. According to Matthew Lych, "the use of AI in education is valuable in some ways, but we must be hyper-vigilant in monitoring its development and its overall role in our world". In this context, I am sure the International Conference on "Artificial Intelligence in Higher Education: Trends and Prospects" will be a fertile ground and meaningful platform for higher education teachers, teacher educators and technology-enthusiasts to discuss the use of AI, VR and AR in the context of 21st century learning, teaching and evaluation.

I congratulate the organizers on the organizing an important event on a theme of great significance and current relevance. I wish the International Conference a grand success.

30.01.2024

(Dr. S. Senthilnathan)

MESSAGE



It is indeed with a great sense of pleasure that I learn about the International Conference on “Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)”, being jointly organized by Sakthi Institute of Teacher Education and Research and Sakthi College of Education for Women on 8th and 9th February 2024.

Artificial Intelligence (AI) is undergoing a swift transformation in higher education, introducing groundbreaking solutions that significantly augment teaching, learning, and assessment. In each of these domains, distinct trends and promising prospects have emerged. It is a next challenging stage where teaching staff start introducing Artificial Intelligence and Machine learning and other techniques into their didactics and clinical courses. The digital transformation and migration from the classical methods of teaching and learning basic Sciences and other discipline courses, which are neither sufficient and nor possible in displaying more in depth without implementing the cutting-edge technology using Artificial Intelligence and Machine learning. In this context, I am sure the International Conference on “Artificial Intelligence in Higher Education: Trends and Prospects” will be a fertile ground and meaningful platform for higher education teachers, teacher educators and technology-enthusiasts to discuss the use of AI, VR and AR in the context of 21st century learning, teaching and evaluation.

I wish to congratulate the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women for initiative to organize this international conference. I take this opportunity to congratulate the organizing secretaries Dr. M. Mani & Dr. K. Kannadasan and the convener Dr. C. Ashok Kumar of the conference all success in the present and future endeavors. I congratulate the organizing team and I wish the International Conference a grand success.

Dr. N. RAMAKRISHNAN

Registrar i/c, TNTEU, Chennai - 600 097

CONFERENCE MESSAGE



I am very much pleased to know that the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women has jointly organizing the International Conference on Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)" on 8th and 9th February 2024.

I appreciate the venture made by Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women wherein they have taken up an important issue which will be very much useful for the future generation. Artificial Intelligence (AI) is rapidly revolutionizing various aspects of our lives, and the field of education is no exception. It is the processing and comprehension of auditory information in individuals with Autism Spectrum Disorder (ASD) and explores the use of Augmentative and Alternative Communication (AAC) systems, including the Picture Exchange Communication System (PECS) and speech-generating devices (SGDs), to enhance communication skills. While the effectiveness of PECS with picture cards is acknowledged, the study suggests that integrating SGDs with mobile devices like iPads offers a more convenient and efficient solution, eliminating the manual preparation process.

AI's pivotal role in addressing deficits in socialization, speech, and eye contact in autistic children beyond immediate positive impacts on life, social, and behaviour skills, AI emerges as a crucial ally in diagnosing and treating Autism Spectrum Disorder (ASD). Looking ahead, on-going integration and advancement of AI technologies hold the promise of transforming education and therapy for children with autism, contributing to their overall well-being and success in academic and social realms.

I wish to congratulate the Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women for initiative to organize this international conference. I take this opportunity to congratulate the organizing secretaries Dr. M. Mani & Dr. K. Kannadasan and the convener Dr. C. Ashok Kumar of the conference all success in the present and future endeavours.

(Mr. N. ALEX)

Special Educator

Indian Special School, Muscat, Oman.

CONFERENCE MESSAGE



Artificial Intelligence (AI) is undergoing a swift transformation in higher education, introducing groundbreaking solutions that significantly augment teaching, learning, and assessment. In each of these domains, distinct trends and promising prospects have emerged:

Teaching: AI-driven adaptive learning platforms are at the forefront, tailoring educational content to meet individual student needs, preferences, and learning styles. This enriches student engagement and results in improved learning outcomes through customized educational experiences. Integrating AI-based virtual assistants and chatbots has become pivotal, offering immediate support to students by addressing queries and providing guidance on coursework. This fosters a more interactive and responsive learning environment, significantly increasing accessibility to educational resources. AI tools are streamlining the process of generating educational content, encompassing quizzes, tutorials, and assessments. This not only saves educators valuable time but also facilitates content diversity. In turn, instructors can redirect their efforts towards higher-order teaching tasks such as facilitating discussions and promoting critical thinking.

Learning: AI-powered tutoring systems are evolving to offer real-time feedback and adaptive learning paths, effectively addressing individual student weaknesses. This approach enhances both student retention and comprehension by tailoring learning experiences to individual skill levels. The infusion of AI into VR/AR applications is creating immersive learning experiences, enabling students to explore complex concepts within a simulated environment. This not only enhances their understanding of abstract concepts but also significantly increases engagement through interactive, experiential learning. AI tools dedicated to the analysis of student essays are providing efficient and objective assessments of writing style, grammar, and content. This automated approach liberates instructor time, allowing for more personalized feedback on written assignments.

Assessment: Automated grading systems, empowered by AI algorithms, are transforming the evaluation process for multiple-choice, short-answer, and coding assignments. This leads to faster grading processes, reduced subjectivity, and increased consistency in evaluation. The application of AI in predictive analytics leverages student data to forecast potential challenges and identify students at risk of falling behind. This facilitates early intervention and the implementation of personalized support systems,

ultimately improving student success rates. AI-powered plagiarism detection tools are playing a crucial role in maintaining academic integrity. By scanning and analyzing vast databases, these tools identify instances of academic dishonesty, ensuring fair assessment practices.

In conclusion, the integration of AI in higher education is on the brink of revolutionizing teaching, learning, and assessment. Embracing these trends promises a more adaptive and responsive educational ecosystem, equipping students for the challenges that lie ahead.

I extend my heartfelt congratulations to the entire management, faculties, and volunteers for orchestrating the International Conference with great success. I wish for the continued grand success of this mega event and am pleased to have connected with it.

(Dr. K. THIYAGU)

Assistant Professor, Central University of Kerala

ORGANIZING SECRETARIES MESSAGE



On behalf of organizing secretary, I am immensely happy and proud to say of our Sakthi Institute of Teacher Education & Research and Sakthi College of Education for Women ventured in jointly organizing the International Conference on Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)" on 8th and 9th February 2024. I am very much thankful to the authorities for having given me the opportunity to organise a two day international conference. The theme of international conference is of vital importance in the present scenario. I hope this conference will provide golden opportunity for the scholars in the field of education and intellectuals from different fields to debate key issues related to the Artificial Intelligence in Higher Education: Trends and Prospects.

Artificial Intelligence (AI) is one such domain that has gained popularity in recent years. Various transformations are happening in the educational field, especially in primary and secondary schools. With the development of computing and information processing techniques, artificial intelligence has been widely applied in educational practices such as intelligent tutoring systems, teaching robots, learning analytics, dashboards, adaptive learning systems, human-computer interactions, etc. The new paradigm also uses virtual or augmented reality technologies to enhance the learning experience. AI is considered as a powerful tool to facilitate new paradigms for instructional design, technological development, and education research that are otherwise impossible to develop in the traditional education modes

We're looking at amazing research opportunities, things that we'll be able to do with artificial intelligence that we couldn't even think about before, that are going to expand our ability to generate new knowledge to contribute to society, with federal funding, with private funding. We're looking at improved knowledge management, something that librarians are always very concerned about, the preservation and distribution of knowledge. The idea would be that artificial intelligence will help us find better the things that we're looking for, the things that we need in order to conduct our academic work. I am sure that the conference will come out with viable solution to enhance 21st century teaching and learning. I am sure this monograph will spark wide interest in the theme of

the conference. I am sure that the international conference will prove as a platform for new innovators to share their new innovations to build a creative society.

I am happy to note that the privilege of conducting an international conference on "Artificial Intelligence in Higher Education: Trends and Prospects (AIHETP-2024)" to be on the 8th and 9th February 2024.

(Dr. M. MANI & Dr. K. KANNADASAN)

Organizing Secretaries

Sakthi Institute of Teacher Education & Research

Dindigul- 624619.