



New Prince

Shri Bhavani College of Engineering & Technology
(An Autonomous Institution)

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Tambaram - Velachery Main Road, Santhosapuram, Chennai - 600 073 | www.npsbcet.edu.in

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DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

**INTERNATIONAL CONFERENCE ON INNOVATIONS IN
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

ICIAIDS'26

27 FEBRUARY 2026

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Ms. A. Benaceer

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Proceedings of International Conference on Innovations in Artificial Intelligence and Data Science

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Mr. K. Loganathan
Founder & Chairman,
New Prince Group of Institutions

MESSAGE FROM THE CHAIRMAN

I am very happy to know that the Department of Artificial Intelligence and Data Science of our institution is organizing the International Conference on Innovations in Artificial Intelligence and Data Science (ICIAIDS'26) on 27th February 2026.

I am confident that this conference will successfully achieve its objectives by bringing together academicians, researchers, industry experts, and students to share their knowledge, innovations, and research findings. Such conferences provide an excellent platform for exchanging ideas and fostering collaborations that contribute to technological advancement.

We are living at a crucial point of transformation, where our country stands at the cusp of a technological revolution. In the realm of intelligent systems, the advent of Artificial Intelligence, Data Science, and sustainable technologies promises a future that is not only advanced but also responsible. These domains are transcending traditional boundaries and creating innovative solutions that benefit society and industry.

I am sure that the deliberations and presentations in this conference will be highly beneficial and inspiring to all participants. It will also significantly contribute to the growth of research and development in multidisciplinary areas.

I congratulate the Department of Artificial Intelligence and Data Science and the organizing team for their dedicated efforts in arranging this international conference and for promoting a strong research culture. I extend my best wishes for the grand success of ICIAIDS'26.

Chairman
New Prince Group of Institution



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Dr. L. Naveen Prasad

Vice-Chairman

New Prince Group of Institutions

MESSAGE FROM THE VICE-CHAIRMAN

I am delighted to know that the Department of Artificial Intelligence and Data Science is organizing the International Conference on Innovations in Artificial Intelligence and Data Science (ICIAIDS'26) on 27th February 2026.

Artificial Intelligence and Data Science are rapidly transforming every sector, from education and healthcare to industry and governance. Conferences like ICIAIDS'26 play a vital role in bringing together researchers, academicians, and industry professionals to share their innovative ideas, research outcomes, and practical experiences. This platform will certainly encourage intellectual exchange and inspire young researchers to explore emerging technologies.

I am confident that this conference will provide valuable insights into recent advancements and create opportunities for collaboration and future research. I hope that all the participants will greatly benefit from the technical sessions and discussions.

I appreciate the sincere efforts of the organizing committee and faculty members for their dedication in making this conference possible. I extend my heartfelt wishes for the grand success of ICIAIDS'26.

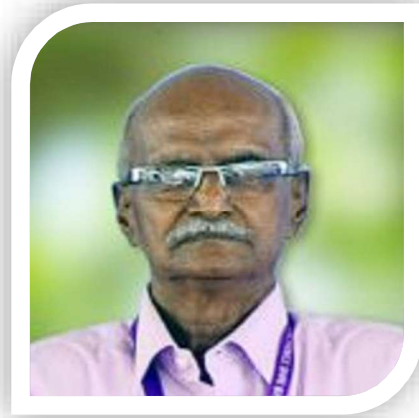
Dr.L.Naveen Prasad
Vice Chairman,NPSBCET



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Prof. A. Swaminathan
Director

MESSAGE FROM THE DIRECTOR

It gives me immense pleasure to know that the Department of Artificial Intelligence and Data Science is organizing the International Conference on Innovations in Artificial Intelligence and Data Science (ICIAIDS'26) on 27th February 2026.

Artificial Intelligence and Data Science have emerged as powerful technologies that are reshaping the future of education, research, industry, and society. This conference provides an excellent platform for researchers, academicians, industry experts, and students to share their innovative ideas, research contributions, and technological advancements. Such initiatives play a significant role in enhancing knowledge, promoting collaboration, and encouraging innovation among young minds.

I am confident that ICIAIDS'26 will foster meaningful discussions and provide valuable insights into emerging trends and challenges in Artificial Intelligence and Data Science. I believe that the exchange of ideas during this conference will contribute significantly to research and development and inspire participants to pursue excellence in their respective fields.

I sincerely appreciate the efforts of the organizing committee and faculty members for their dedication and hard work in organizing this international conference. I extend my best wishes to all the participants and wish the conference a grand success.

Prof. A. Swaminathan
Director, NPSBCET



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Dr. T. Saravanan
Principal

MESSAGE FROM THE PRINCIPAL

It gives me great pleasure to know that the Department of Artificial Intelligence and Data Science is organizing the International Conference on Innovations in Artificial Intelligence and Data Science (ICIAIDS'26) on 27th February 2026.

Artificial Intelligence and Data Science are transforming the way we live, learn, and work. These technologies are driving innovation across various sectors and creating new opportunities for research and development. ICIAIDS'26 provides an excellent platform for academicians, researchers, industry experts, and students to present their research findings, exchange innovative ideas, and explore recent advancements in these emerging fields.

I am confident that this conference will promote academic excellence, research collaboration, and technological innovation. I believe that the technical sessions and interactions will enrich the knowledge of the participants and motivate them to contribute to the advancement of Artificial Intelligence and Data Science.

I appreciate the dedicated efforts of the organizing committee, faculty members, and students for successfully organizing this international conference. I extend my best wishes to all the participants and wish ICIAIDS'26 a grand success.

Dr. T. Saravanan
Principal, NPSBCET

Credit Card Fraud Detection using Imbalanced Learning

Rohini N¹, Jayalakshmi V²

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Abstract: This paper proposes a credit card fraud detection system that addresses the challenge of highly imbalanced transaction data. Since fraudulent transactions represent only a small fraction of total transactions, traditional models tend to favour the majority class. To overcome this issue, under sampling and SMOTE were applied to balance the dataset. Machine learning algorithms such as Logistic Regression and SVM were used for classification. The results demonstrate improved fraud detection performance, particularly in terms of recall, while maintaining a reasonable balance between precision and accuracy.

Keywords: SMOTE, SVM, Logistic Regression.

Machine Learning Based Data Security in Education

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Abstract: As artificial intelligence becomes more and more prevalent, machine learning algorithms are being used in a wider range of domains. Big data and processing power, which are typically gathered via crowdsourcing and acquired online, are essential for the effectiveness of machine learning. Sensitive and private data, such as ID numbers, personal mobile phone numbers, and medical records, are frequently included in the data acquired for machine learning training. A significant issue is how to effectively and cheaply protect sensitive private data. With this type of issue in mind, this article first discusses the privacy dilemma in machine learning and how it might be exploited before summarizing the features and techniques for protecting privacy in machine learning algorithms. Next, the combination of a network of convolutional neural networks and a different secure privacy approach is suggested to improve the accuracy of classification of the various algorithms that employ noise to safeguard privacy. This approach can acquire each layer's privacy budget of a neural network and completely incorporates the properties of Gaussian distribution and difference. Lastly, the Gaussian noise scale is set, and the sensitive information in the data is preserved by using the gradient value of a stochastic gradient descent technique. The experimental results showed that a balance of better accuracy of 99.05% between the accessibility and privacy protection of the training data set could be achieved by modifying the depth differential privacy model's parameters depending on variations in private information in the data.

Keywords: Artificial intelligence, Gaussian distribution, Gradient descent technique.