



# VELAMMAL

## INSTITUTE OF TECHNOLOGY

Chennai - Kolkata Highway, Panchetti, Ponneri - 601 204



# 6<sup>th</sup> International Conference on Artificial Intelligence, 6G Communications and Network Technologies

25<sup>th</sup> & 26<sup>th</sup>  
MARCH 2026

**PROCEEDINGS**

Organized By

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING**

In Association with



ISBN Number : 978-81-985448-5-8



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INSTITUTION'S  
INNOVATION  
COUNCIL  
(Ministry of HRD Initiative)

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6G COMMUNICATIONS AND NETWORK TECHNOLOGIES**

**“Message From The Chairman ”**



**Shri. M. V. Muthuramalingam**  
**Chairman, Velammal Educational Trust**

It gives me immense pleasure to welcome you all to ICA6NT-2026. This conference represents the zenith of our collective pursuit of knowledge, bringing together scholars, researchers, and industry leaders from across the globe.

As Chairman of Velammal Educational Trust, I am proud to see our institution transcend boundaries and foster innovation in Artificial Intelligence, 6G communications, and network technologies. I wish every participant success in their endeavors and hope this gathering inspires new collaborations and discoveries.

**Wish you all the very best!**

**Director**

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## **Analysis of Depression Risk**

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### **ABSTRACT**

This paper presents an intelligent and data-driven system for the **Analysis of Depression Risk** using advanced Machine Learning techniques. Depression is one of the most common and serious mental health disorders affecting people across different age groups, particularly students and working professionals who often face academic pressure, career uncertainty, workload stress, and social challenges. In today's fast-paced environment, mental health issues frequently go unnoticed until they become severe. Therefore, early identification of depression risk plays a crucial role in providing timely emotional support, counseling, and preventive care before the condition worsens. The proposed system focuses on analyzing multiple behavioral, lifestyle, and psychological factors that are commonly associated with depression. These factors include sleep patterns, academic pressure, work-related stress, level of social interaction, daily habits, and emotional state. By collecting and examining these attributes, the system aims to detect patterns that may indicate a higher likelihood of depression. Instead of relying solely on subjective observation, this approach uses data-driven insights to support more objective and consistent evaluation. Unlike traditional psychological assessments, which often require manual evaluation by mental health professionals through interviews and questionnaires, the proposed system automates the analysis process using supervised machine learning models. The system accepts user-provided inputs, performs data preprocessing such as cleaning, encoding, and normalization, and then applies trained classification models to estimate the individual's depression risk level. Various machine learning algorithms are evaluated to determine the most accurate and reliable model for prediction. Experimental results demonstrate