



# INFORMATICS INSTITUTE OF TECHNOLOGY

**Informatics Institute of Technology**

In Collaboration with

**University of Westminster, London**

**Face Waves**

**Cybernetic Poem Generator in Tamil Language**

**Using Human Emotions**

A Dissertation by

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## **Abstract**

Emotions are a fundamental aspect of the human experience, and poetry has long been used as a means of expressing and exploring these emotions. However, not everyone is comfortable with or skilled at expressing their emotions through poetry. This can be due to a lack of experience, a limited vocabulary, or simply a difficulty in finding the right words to express their feelings. The problem of expressing emotions through poetry is further compounded by the fact that emotions themselves can be complex and multifaceted. Different people may experience the same emotion in different ways, and emotions can also be influenced by cultural, social, and personal factors.

In order to determine the most appropriate technique to generate a poem in Tamil language based on the given human emotion, this research project provides an experimental methodology. A number of tests were run to determine the most effective way to address the problem, and Deep Learning emerged as having the capacity to perform at the required level.

The outcomes showed promise for generate a poem based on the human emotion. Nevertheless, with the availability of a larger dataset, the solution has room for improvement. Additionally, it opened the door for further DL study and exploration of NLP poem generation specially in Tamil language research using semantic techniques.

**Keywords:** Natural Language Processing, Deep Learning, Image Processing, Human-Computer Interaction, Neural Networks, User Experience, User Interface

### **Subject Descriptor:**

- Computing methodologies → Artificial intelligence → Natural language processing → **Information extraction**
- Computing methodologies → Machine learning → Machine learning approaches → **Neural networks**