

# Speech Emotion Recognition Using Feedforward Neural Network

Deepali Sale<sup>1</sup>, Anand Bhagat<sup>2</sup>, Pranit Bhalekar<sup>3</sup>, Rohit Gorde<sup>4</sup>, Mahendra Gayakwad<sup>5</sup>

Associate Professor<sup>1</sup>

Students<sup>2,3,4,5</sup>

Dr. D. Y. Patil College of Engineering and Innovation, Pune, India.

**Abstract:** *Speech Emotion Recognition (SER) has gained increasing attention due to its application in fields such as human-computer interaction, healthcare, customer service automation, and affective computing. This review focuses on the application of Deep Neural Networks (DNNs), specifically Feedforward Neural Networks (FNNs), in detecting and classifying emotions from speech signals. Recent advancements in deep learning have significantly enhanced the ability of machines to interpret emotional cues from auditory data. This paper discusses the motivation, objectives, and scope of employing DNN FNN architectures for SER. We also address the technical feasibility and potential of this approach for real-time applications. By reviewing existing literature, this study aims to provide insights into the current progress, challenges, and future prospects of SER systems.*

**Keywords:** Speech Emotion Recognition (SER), Feedforward Neural Networks (FNN), Deep Neural Networks (DNN), Affective Computing, Human - Computer Interaction (HCI), Real- time Systems