

**UNIVERSITI TEKNOLOGI MARA**

**EMOTION CLASSIFICATION BASED ON TEXT USING  
CONVOLUTIONAL NEURAL NETWORK**

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## **ABSTRACT**

This project constitutes a comprehensive exploration into the realm of "Emotion Classification Based on Text Using Convolutional Neural Network (CNN)." The research addresses the intricate challenges associated with accurately categorizing various emotions within textual data. The proposed solution harnesses the power of CNN to discern nuanced patterns and features that contribute to the identification of distinct emotional states. The primary objectives encompass an in-depth investigation into the prerequisites for CNN implementation, the development of a prototype system, and a thorough evaluation of its accuracy in classifying emotions within text. Impressively, the system attains an 83% accuracy rate, underscoring its efficacy in deciphering the complexities of emotional expressions through textual content.

This project not only contributes to the evolving landscape of natural language processing but also highlights the significance of leveraging advanced technologies, such as CNN, for emotion analysis. The findings of this research provide valuable insights into the potential of AI-driven models in understanding and categorizing emotions, paving the way for future advancements in sentiment analysis and emotion recognition. The endeavor emphasizes the critical role of responsible AI applications, especially in deciphering the intricate nuances of human emotions through textual data.

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