

DEEP NEURAL NETWORKS ARCHITECTURES FOR CHATBOT CREATION

This thesis presents the development of an emotionally aware chatbot, achieved through the integration of a T5 Transformer model with an emotional detection module. The chatbot's responses are influenced by the emotional context present in user input, resulting in sentiment-aligned replies.

The author explores multiple architectural variations, trained and evaluated across multiple conversational datasets. All variations are evaluated by both human volunteers in a blind survey and automated BLEU score assesment. The best-performing model is integrated into a web application for ease of use.

This work contributes to the evolving field of natural language processing and its potential real-world applications in enhancing human-robot interaction.



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