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Abstract

This research was conducted by a team of three undergraduate Computer Science students to create a website that acts as a hub for speech emotion analysis and development. SED is a newly designed website equipped with an embedded machine-learning model used to predict emotion in speech and provide tips in order to improve emotion in speech. The focus of the project was to design and implement a web hub in order to help people produce and understand emotion in speech. The team implemented a convolutional Neural Network that was trained on the RAVDESS database in order to detect different emotions in speech. We then used Flask to implement the backend of a webpage that accepts a wav file from the user and predicts an emotion from it using the model. The employed model has the potential to provide users with a better understanding of the emotion in speech, and the website contains tips on how to obtain the desired emotion in their speech.