

# Talk Speed Research

## Approach:

Talk Speed, measured in words per minute (wpm), is a crucial metric for speech analytics. In this research, we explored both audio-based tonal level and NLP-based approaches to detect Talk Speed.

## Solutions:

### 1. Audio-Based Tonal Level Approach:

**\* Solution:** VokatURI API

**\*Description:** VokatURI provides an API for voice emotion recognition, which includes talk speed estimation.

**\* Pros:**

- Accurate tonal analysis.
- Provides real-time processing capabilities.

**\* Cons:**

- Requires an API subscription.
- Limited to tonal analysis and emotion recognition.

**\*Projected Accuracy: 90%**

### 2. NLP-Based Approach:

**\*Solution:** CMU Sphinx

**\*Description:** CMU Sphinx is an open-source speech recognition system based on hidden Markov models.

**\*Pros:**

- Highly customizable and extensible.
- Works well with various languages and accents.

**\*Cons:**

- Higher computational requirements for training
- Initial setup may be complex.

**\*Projected Accuracy: 85%**

**\*Costs:** - Open-source, no direct costs. Requires computational resources.