METHODS TO DYSFLUENT SPEECH TRANSCRIPTION AND DETECTION

Tech ID: 33377 / UC Case 2024-062-0

PATENT STATUS

Patent Pending

BRIEF DESCRIPTION

Dysfluent speech modeling requires time-accurate and silence-aware transcription at both the word-level and phonetic-level. However, current research in dysfluency modeling primarily focuses on either transcription or detection, and the performance of each aspect remains limited.

To address this problem, UC Berkeley researchers have developed a new unconstrained dysfluency modeling (UDM) approach that addresses both transcription and detection in an automatic and hierarchical manner. Furthermore, a simulated dysfluent dataset called VCTK++ enhances the capabilities of UDM in phonetic transcription. The effectiveness and robustness of UDM in both transcription and detection tasks has been demonstrated experimentally.

UDM eliminates the need for extensive manual annotation by providing a comprehensive solution.

ADVANTAGES

- Comprehensive solution
- Automated, hierarchical approach
- Demonstrated effectiveness

SUGGESTED USES

- Diagnosis of speech disorders in, e.g., hospitals
- Evaluation of early language literacy is school settings

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INVENTORS

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OTHER INFORMATION

CATEGORIZED AS

- **Computer**
  - Software
- **Medical**
  - Diagnostics
  - Rehabilitation
  - Research Tools
  - Screening
  - Software

RELATED CASES

2024-062-0

» Speech and Language Pathology

RELATED MATERIALS

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