Jiawei Yu

INFORMATION

Department of Electronics Engineering and Computer Science
Beijing Language and Culture University
Beijing

Phone: 86-15600530323
Email: vyujiawei@gmail.com
Website: cserv.github.io

EDUCATION

Beijing Language and Culture University (BLCU)   Beijing, China

- M.S. in Computert Science.   2017-2020

  - *Advisor*: Prof. Jinsong Zhang
  - *Overall GPA*: 3.63/4.0 (90.1/100, top 1%)
  - *Main works*: Using acoustic and articulatory features to improve language recognition under deep learning framework.

Changchun University of Technology (CCUT)   Changchun, China

- B.S. in Computert Science.   2012-2016

  - *Overall GPA*: 3.52/4.0 (86.4/100, top 1%)

RESEARCH EXPERIENCE

SAIT Lab, Beijing Language and Culture University   Beijing, China

- **Research Assistant, supervised by Prof. Jinsong Zhang**   Sep, 2020-Present

  - Mainly working on Language Recognition using articulatory features.

Center for Speech and Language Technologies(CSLT), Tsinghua University   Beijing, China

- **Research intern, supervised by Prof. Dong Wang.**   Sep, 2018-July, 2019

  - Researched on speaker recognition using attention mechanism.
  - Researched on zero-resource language recognition.

RESEARCH PROJECTS

- **Articulatory features based Dilated LSTM model for short utterance language recognition**

  - Utilizing the advantage of cross-language modeling of articulatory features and the effectiveness of Dilated LSTM in modeling temporal dependencies in the acoustic signal for short utterance [1].

- **Articulatory features based TDNN model for language recognition**

  - Researched on the application of articulatory information in deep neural network based language recognition [3].

- **Zero-resource language recognition**

  - Proposed a recognized scheme for low resource languages [4].

- **Phonetic-attention for deep speaker verification**

  - Researched on applying attention mechanism to improve the discriminability between speaker vectors.

PUBLICATIONS AND PATENTS

1. **Jiawei Yu**, Minghao Guo, and Jinsong Zhang, "Articulatory Features Based Dilated LSTM Model for Short Utterance Language Recognition," in *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, 2021. (submitted)

2. **Jiawei Yu**, "An Overview of Speech Emotion Recognition," One chapter in the book "Basic Law for ASR" in Center for Speech and Language Technologies(CSLT) internal in Tsinghua University. 2019. (Under processing)

3. **Jiawei Yu**, Minghao Guo, Yanlu Xie, and Jinsong Zhang, "Articulatory Features Based TDNN Model for Spoken Language Recognition," in *2019 International Conference on Asian Language Processing (IALP)*. IEEE, 2019.

4. **Jiawei Yu** and Jinsong Zhang, "Zero-resource Language Recognition," in *2019 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC)*. IEEE, 2019.

5. **Jiawei Yu**, Yanlu Xie, Jinsong Zhang, "Robust Language Identification using X-vectors", *proceedings of the 13th Phonetics Conference of China*, PCC 2018.

6. Jinsong Zhang, **Jiawei yu** and Yanlu Xie, Patent No. GCN190618, "The Method of Articulatory Features Based TDNN Model for Spoken Language Recognition," 2019.

ACADEMIC ACTIVITIES

- **Reviewer**

  International Conference on Asian Language Processing (IALP) 2019

  Asia-Pacific Signal and Information Processing Association (APSIPA) 2019

- **Presentation**

  Made an oral presentation for the Paper [4] in Lanzhou, 2019.11

  Made an poster presentation for the Paper [3] in Shanghai, 2019.10

  Made an oral presentation for the Paper [5] in Guangzhou, 2018.11

TEACHING EXPERIENCES

- 2019 Fall and Spring Tutor for **Higher Mathematics**, College of Information Science, Beijing Language and Culture University.

- 2018 Fall and Spring Tutor for **Linear Algebra**, College of Information Science, Beijing Language and Culture University.

GRANT AND AWARDS

- 2019.08   **Best Student Paper Award**, National Conference on Man-Machine Speech Communication (NCMMSC), Qinghai.

- 2018-2019   **2nd Prize of Excellent Undergraduate Scholarship**, BLCU.

- 2018.10   **6th Place** in the Oriental Language Recognition (OLR) 2018 Challenge, Hawaii.

- 2018-2017   **3rd Prize of Excellent Undergraduate Scholarship**, BLCU.

- 2012-2016   **1st Prize Scholarship** in four consecutive years (1%), CCUT.

- 2014.10   **1st Prize** in Jilin Contest District in China Contemporary Undergraduate Mathematical Contest in Modeling, Changchun.

- 2014.09   **Bronze Medal** in The ACM International Collegiate Programming Contest (ACM-ICPC) Asia Regional Contest Changchun Site, Changchun.

- 2014.06   **1st Prize** in Programming Contest of CCUT(1%), CCUT.

KNOWLEDGE AND SKILLS

Theoretical Background

- Machine learning, Language recognition, Speaker recognition.

Technical Skills

- Programming languages: C/C++, Python, SHELL.

- Toolkits: Kaldi, TensorFlow, LaTeX.