



AISHELL is an innovation technology enterprises focusing on voice data and technical services, including voice recognition, voice synthesis, voiceprint recognition dataset.

AISHELL currently do data innovation and differentiated services program, aiming at producing accurate data set for homes, cars, robots according the application needs for the specialized scene. Using machine learning platform, we established a leading core technology system in the voice data evaluation, auxiliary transfer, data analysis, and further expand the integration of technology, big data and IOT.

AISHELL' s vision: With ideology of open data, data exchange, data production program innovation, to accomplish artificial intelligence democratization.



## Smart Home Data Program

The real home scene multi-angle recording, high degree of product fit, covering smart home of the industry.



## **Autonomous Driving Data Program**

A variety of speed combinations for real road conditions, complex scene corpus design, synchronous multi-channel recording.



## **Smart Robot Data Program**

Real scene robot command data, multi-angle, altitude recorded of command control type ocorpus design.



## **Smart Product Customization Data Program**

Scene data, multimodal data, virtual reality scene data production scheme design, technical evaluation.



## **Smart Product Customization Data Program**

Scene data, multimodal data, virtual reality scene data production scheme design, technical evaluation.

## Simulating scene data customization, product evaluation design

### Real scene noise

Recording real scene under multi-point at the same time, with close talking microphone plus the far-field enhanced microphone. The multiple application of intelligence voice scenarios cover family and public, including the living room, kitchen and toilet, office, industrial production, stations, roads and other.

### Data customization

Personalized demand customization data.

## Product evaluating design

Provide data configuration technology services, data quality assessment. Provide quality assurance for data set production.



## **Autonomous Driving Data Program**

A variety of speed combinations for real road conditions, complex scene corpus design, synchronous multi-channel recording.

## **Autonomous Driving Speech Corpus**

- Real car and road scene A variety of road conditions A variety of options Complex scenes
- Multi-Point recording
- Voice Control

#### **Details**

Subject: Smart Car Data Corpus Serial ID: AISHELL-ASR0011

#Recording Point: 5
Total Time: 750 Hours

#Speaker: 300

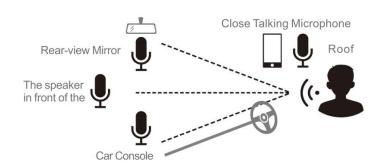
Language: Chinese

Region: China

Devices: High Fidelity Microphone Android Phone 16000Hz

16bit iOS Phone 16000Hz 16bit

## **Analog Recording Live**



Subject: Smart Car Data Corpus (EV)

Serial ID: AISHELL-ASR0031

#Recording Point: 9

Total Time: 10000 Hours

#Speaker: 2000 Language: Chinese

Region: China

Devices: High Fidelity Microphone Android Phone 16000Hz 16bit iOS

Phone 16000Hz 16bit

Transcriptions are chosen from multi-field: POI/Road Information/Map/wake up/Command/Control



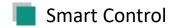
## **Smart Home Data Program**

The real home scene multi-angle recording, high degree of product fit, covering smart home of the industry.

## **Smart Home Speech Corpus**







#### **Details**

Subject: Smart Home Data Corpus

Serial ID: AISHELL-ASR0010

#Recording Point: 7

Total Time: 1854 Hours

#Speaker: 646

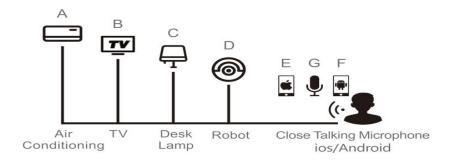
Language: Chinese

Region: China

Devices: High Fidelity Microphone Android Phone 16000Hz 16bit iOS

Phone 16000Hz 16bit

## **Analog Recording Live**



Subject: Smart Home Data Corpus (English)

Serial ID: AISHELL-ASR0020

#Recording Point: 4 Total Time: 400 Hours

#Speaker: 200 Language: English Region: America

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Devices: High Fidelity Microphone

**Transcriptions are chosen from multi-field:** Wake up Home APP voice control: Amp/TV/Air conditioning/ Radio/light TV movie/ Music/Command words/Numbers



## **Basic Data Program**

#### **Voice Print Recognition Corpus**

Serial ID: AISHELL-VPR0061

Total Time: 410 Hours

#Speaker: 1300 Language: Chinese

Region: China

Devices: Android Phone 16000Hz 16bit iOS Phone 16000Hz 16bit

#### **Voice Print Recognition Corpus**

Serial ID: AISHELL-VPR0062

Total Time: 666 Hours

#Speaker: 7793 Language: Chinese

Region: China

Devices: Android Phone 16000Hz 16bit iOS Phone 16000Hz 16bit

#### **Chinese Mandarin Speech Corpus**

Serial ID: AISHELL-ASR0009

Total Time: 3000 Hours

#Speaker: 2000 Language: Chinese

Region: China

Devices: High Fidelity Microphone Android Phone 16000Hz 16bit iOS

Phone 16000Hz 16bit

#### **Chinese Children Speech Corpus**

Serial ID: AISHELL-ASR0018

Total Time: 170 Hours

#Speaker: 1117 Language: Chinese

Region: China

Devices: Android Phone 16000Hz 16bit iOS Phone 16000Hz 16bit

# **Chinese Children English Speech Corpus**

Serial ID: AISHELL-ASR0019

Total Time: 1700 Hours

Language: English

Region: China

Devices: Android Phone 16000Hz 16bit iOS Phone 16000Hz 16bit

#### **Chinese & English Speech Corpus**

Serial ID: AISHELL-ASR0056

Total Time: 1000 Hours

Language: Chinese & English

Region: China

Devices: Android Phone 16000Hz 16bit iOS Phone 16000Hz 16bit

#### **Chinese Senior Speech Corpus**

Serial ID: AISHELL-ASR0060

Total Time: 780 Hours

#Speaker: 500

Language: Chinese

Region: China

Devices: High Fidelity Microphone Android Phone 16000Hz 16bit iOS

Phone 16000Hz 16bit

#### **India Hindi Speech Corpus**

Serial ID: AISHELL-ASR0026

Total Time: 550 Hours

#Speaker: 580 Language: Hindi Region: India

Devices: Android Phone 16000Hz

16bit iOS Phone 16000Hz 16bit



## **Open Source Data**

Shared data to promote the development of artificial intelligence

### **AISHELL-1**



178 Hours 400 speakers in the recording



**Speech& Speaker Recognition** 



Merged with Kaldi system Kaldi recipe

Paper: AISHELL-1: An open-source Mandarin speech corpus and a speech recognition baseline

### **AISHELL-3**



85 Hours 218 speakers in the recording



Test-To-Text (TTS) Systems



Open Source https://sos1sos2sixteen.github.io/aishell3/

Paper: AISHELL-3: A Multi-speaker Mandarin TTS Corpus and the Baselines

### **AISHELL-2**



1000 Hours1991 speakers in the recording



**Speech&Speaker Recognition** 



Merged with Kaldi system Kaldi recipe

Paper: AISHELL-2: Transforming Mandarin ASR Research Into Industrial Scale

#### AISHELL-4



120 Hours 60 speakers in the recording



**Speech front-end processing&Speech Recognition Speaker Diarization** 



**Open Source** 

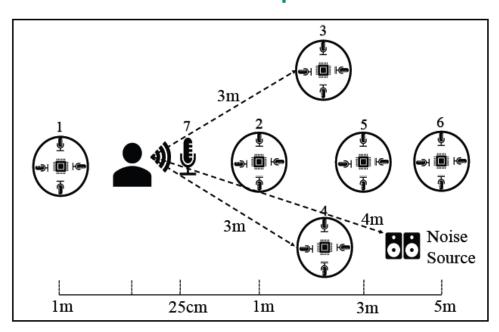
**Paper: AISHELL-4:** An Open Source Dataset for Speech Enhancement, Separation, Recognition and Speaker Diarization in Conference Scenario



## **Open Source Data**

Shared data to promote the development of artificial intelligence

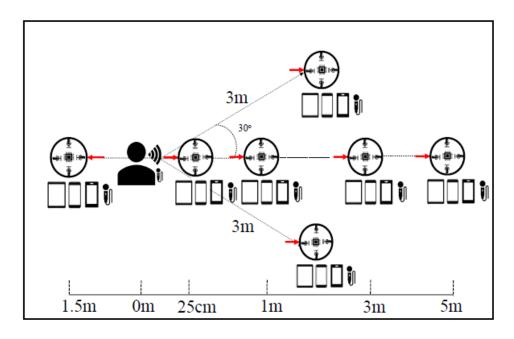
## AISHELL-WakeUp-1



HI-MIA: A FAR-FIELD TEXT-DEPENDENT SPEAKER VERIFICATION DATABASE AND THE BASELINES

http://www.aishelltech.com/wakeup\_data

### **AISHELL-DMASH**



The INTERSPEECH 2020 Far-Field Speaker Verification Challenge

http://www.aishelltech.com/DMASH\_Dataset



### **TEST DATASETS**

**License: Apache License V.2.0** 

#### AISHELL2-2018A-EVAL

**TEST DATA**:5000 utterances from 10 speakers **DEV DATA**:2500 utterances from 5 speakers

#### **DATA Information**

-Sampling Rate: 16KHz-Sample Format: 16bit-Environment: Indoor-Speech Data Type: PCM

-Recording Equipment: ios/Android/High Fidelity Microphone

## AISHELL-2019B-EVAL

**Wake-up Words Speech Dataset** 

#### **DATA Information**

-Total Time: 437.67Hours

-Sampling Rate: 44.1KHz & 16KHz

-Sample Format: 16bit-Environment: Indoor-Speech Data Type: PCM

-Recording Equipment: Microphone-Array Board /High Fidelity Microphone

#### **AISHELL-2019A-EVAL**

### **Near & Far Field Speech Dataset**

#### **DATA Information**

-Total Time: 24.3Hours

-Sampling Rate: 44.1KHz & 16KHz

-Sample Format: 16bit-Environment: Indoor-Speech Data Type: PCM

-Recording Equipment: High Fidelity Microphone

#### **AISHELL-2019C-EVAL**

### **Translator Recording Speech Dataset**

#### **DATA Information**

-Total Time: 31.2Hours

-Sampling Rate: 44.1KHz & 16KHz

-Sample Format: 16bit-Environment: Indoor-Speech Data Type: PCM

-Recording Equipment: JoneR Translator /High Fidelity Microphone



### **TEST DATASETS**

**License: Apache License V.2.0** 

**AISHELL-2021A-EVAL** 

**Voice Command Test Dataset for Car (EV)** 

**DATA Information** 

-Total Time: 7.2Hours
-Sampling Rate: 16KHz
-Sample Format: 16bit
-Environment: Car
-Speech Data Type: wav

-Recording Equipment: High Fidelity Microphone

**AISHELL-2021D-EVAL** 

**Chinese Conversational Speech Test Dataset** 

**DATA Information** 

-Total Time: 1.95Hours

-Sampling Rate: 8KHz -Sample Format: 16bit -Environment: Indoor

-Speech Data Type: wav

-Recording Equipment: Mobile Phone

**AISHELL-2021B-EVAL** 

**Far-Field Speech Test Dataset for Smart Home** 

**DATA Information** 

-Total Time: 15.8Hours
-Sampling Rate: 16KHz
-Sample Format: 16bit
-Environment: Indoor
-Speech Data Type: way

-Recording Equipment: Android Mobile Phone

**Court Hearing Scene Speech Test Dataset** 

**DATA Information** 

**AISHELL-2021F-FVAL** 

-Total Time: 1Hours
-Sampling Rate: 16KHz
-Sample Format: 16bit
-Environment: Indoor
-Speech Data Type: wav

AISHELL-2019C-EVAL
Chinese Children Speech Test Dataset

**DATA Information** 

-Total Time: 2.18Hours

-Sampling Rate: 16KHz -Sample Format: 16bit -Environment: Indoor

-Speech Data Type: wav

-Recording Equipment: Mobile Phone

## **Core technology**

The technical staff of the industry frontier, intelligent instead of manpower, improve data quality



## Voice data source quality evaluation system

Fast and accurate evaluation of voice signal amplitude, noise, transfer error rate determination, phoneme balance calibration.



## Automatic voice transfer system

Reduce manual assistance, tend to be intelligent, support for Mandarin and English voice.



## Scene data set test system

Support widespread data set plus noise, multi-distance data reverberation performance test, support environment compliance test of vehicle data set and driving condition



## Audio retrieval system

Auxiliary language source data classification makes it easy to handle massive data.

## **Partner**

Baid的百度	ChipIntelli	Tencent 腾讯	NIO <b>☆</b> 蔚来	S@undAl 声智科技	-emotech.
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简单大学 Tsinghua University	は京大学 PEKING UNIVERSITY	<b>少</b> 北京都電大學	る ガルフサナ学 MURTINESSIERS POLYTECHNICAL ENTERSITY	14. 军工经大学	後旦大學
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Engaging in innovative changes in artificial intelligence data and technology.









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