

### News



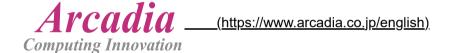
<u>Transportation</u> information has been updated.



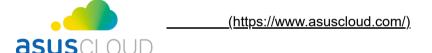
For all participants staying at the Ambassador Hotel, we are now offering free taxi services instead of a shuttle bus to and from NYCU, which we hope will be more convenient. Please feel free to use this service at your convenience. To facilitate this, we have arranged for both the Ambassador Hotel and the conference front desk to assist in calling taxis for all guests staying at the hotel, and the conference will cover the taxi fare.



#### **Sponsors:**











(https://www.phison.com/zh-tw/)





業技術研究院<sub>(https://www.itri.org.tw/)</sub>



Things to do in Taiwan - 10 Top Taiwan Attractions ...



陽明交大英文校宣影片-《Infinite》



### Welcome to O-COCOSDA 2024!

O-COCOSDA 2024: The 27th International Conference of the Oriental COCOSDA will take place from October 17-19 in Hsinchu, Taiwan. Hosted once again by the National Yang Ming Chiao Tung University (NYCU), this conference will be held in-person. We kindly encourage your physical attendance to fully experience and engage with the event.

Oriental COCOSDA (O-COCOSDA), the Oriental chapter of COCOSDA, an acronym of the International Committee for the Coordination and Standardisation of Speech Databases and Assessment Techniques, was established in 1997. The purpose of O-COCOSDA is to exchange ideas, share information, and discuss regional matters on the creation, utilization, and dissemination of spoken language corpora of oriental languages and also on the assessment methods of speech recognition/synthesis systems as well as promote speech research on oriental languages.

The annual Oriental COCOSDA international conference is the flag conference of Oriental COCOSDA. The first preparatory meeting was held in Hong Kong in 1997 and then the past 26 workshops were held in Japan, Taiwan, China, Korea, Thailand, Singapore, India, Indonesia, Malaysia, Vietnam, Japan, China, Nepal, Taiwan, Macau, India, Thailand, China, Malaysia, Korea, Japan, Philippines, Myanmar, Singapore, Vietnam and India. The 27th Oriental COCOSDA Conference is returning to Taiwan and will be held on Oct. 17-19, in Hsinchu, Taiwan hosted again by the National Yang Ming Chiao Tung University (NYCU), Taiwan.

The organizers of O-COCOSDA 2024 invite all researchers, practitioners, industry partners and sponsors to join the conference. The O-COCOSDA venue provides a regular forum for the presentation of international cooperation in developing speech corpora and coordinating assessment methods of speech input/output systems for both academic and industry researchers. Continuing a series of 26 successful previous meetings, this conference spans the research interest areas of database development and assessment methods. We thank you for your support and look forward to welcoming you to the conference. Stay safe and healthy!

We are pleased to inform you that the conference will be held in-person. Your physical attendance is highly encouraged to facilitate the full experience of the event. However, if you encounter special circumstances (e.g., issues with visa applications), please discuss this with the organizers to seek approval for alternative arrangements.

### Program

Time	Day 1: 10/17 (Thu.)	Day 2: 10/18 (Fri.)	Day 3: 10/19 (Sat.)
08:45-09:00	Opening Ceremony		
09:00-10:00	Keynote Speech #1	Keynote Speech #2	Keynote Speech #3
	Prof. Jen-Tzung Chien	Prof. Chin-Hui Lee	Prof. Satoshi Nakamura
10:00-10:30	Coffee Break	Coffee Break	Coffee Break
10 : 30-11 : 45	Oral session #1	Oral session #4	Country Report
	Speech Corpora	Best Paper	
		Candidates	

Time	Day 1: 10/17 (Thu.)	Day 2: 10/18 (Fri.)	Day 3: 10/19 (Sat.)
11:45-13:00	Lunch Break	Lunch Break	Closing Ceremony ( end at 12:15)
13:00-14:00	Oral Session #2 Speech Corpora		
14:00-15:00	Poster Session #1 Language Acquisition, Pronunciation, and Speech Learning	SanXia+YingGe Cultural Tour	
15:00-15:30	Coffee Break		
15 : 30-16 : 30	Oral Session #3 Speech Generation		
16:30-17:30	Poster Session #2 Speech Technology, Machine Learning, and AI in Speech Processing		
18 : 30-20 : 30	Welcome Reception	Banquet	

#### **Oral Session #1**

Time: Thursday, October 17, 2024, 10:30 -11:45

#### **Speech Corpora**

Session Chair: Yi-Wen Liu, National Tsing Hua University, Taiwan

10:30-10:45

#### **Check Your Audio Data: Nkululeko for Bias Detection**

Felix Burkhardt, Bagus Tris Atmaja, Anna Derington, Florian Eyben, and Bjoern Schuller

10:45-11:00

#### CAO Robot for Taiwanese/English Knowledge Graph Application

Chang-Shing Lee, Mei-Hui Wang, Guan-Ying Tseng, Chao-Cyuan Yue, Hao-Chun Hsieh, and Marek Reformat

11:00-11:15

## **Instant-EMDB: A Multi Model Spontaneous English and Malayalam Speech Corpora For Depression Detection**

Anjali Mathew, Raniya M, Harsha Sanjan, Amjith S B, Reni K Cherian, Starlet Ben Alex, Priyanka Srivastava, and Chiranjeevi Yarra

11:15-11:30

### **Chinese Psychological Counseling Corpus Construction for Valence-Arousal Sentiment Intensity Prediction**

Hsiu-Min Shih, Tzu-Mi Lin, Yu-Wen Tzeng, Jung-Ying Chang, Kuo-Kai Shyu, and Lung-Hao Lee

11:30-11:45

#### **UCSYSpoof: A Myanmar Language Dataset for Voice Spoofing Detection**

Hay Mar Soe Naing, Win Pa Pa, Aye Mya Hlaing, Myat Aye Aye Aung, Kasorn Galajit, and Candy Olivia Mawalim

#### **Oral Session #2**

Time: Thursday, October 17, 2024, 13:00 -14:00

#### **Speech Corpora**

Session Chair: Ming-Hsiang Su, Soochow University, Taiwan

13:00-13:15

Speech Watermarking for Tampering Detection using Singular Spectrum Analysis with Quantization Index Modulation and Psychoacoustic Model

Pantarat Vichathai, Puchit Bunpleng, Patharapol Laolakkana, Sasiporn Usanavasin, Phondanai Khanti, Kasorn Galajit, and Jessada Karnjana

13:15-13:30

# **IIITSAINT-EMOMDB:** Carefully Curated Malayalam Speech Corpus With Emotion And Self-reported Depression Ratings

Christa Thomas, Guneesh Vats, Aravind Johnson, Ashin George, Talit Sara George, Reni K Cherian, Priyanka Srivastava, and Chiranjeevi Yarra

13:30-13:45

### **CL-CHILD Corpus: The Phonological Development of Putonghua in Children from Dialect-speaking Regions**

Jiewen Zheng, Tianxin Zheng, and Mengxue Cao

13:45-14:00

WikiTND24: A Chinese Text Normalization Database

Wu-Hao Li, and Chen Yu Chiang

#### **Oral Session #3**

Time: Thursday, October 17, 2024, 15:30 -16:30

#### **Speech Generation**

Session Chair: Ying-Hui Lai, National Yang Ming Chiao Tung University, Taiwan

15:30-15:45

### VoxHakka: A Dialectally Diverse Multi-speaker Text-to-Speech System for Taiwanese Hakka

Li-Wei Chen, Hung-Shin Lee, and Chen-Chi Chang

15:45-16:00

#### **Learning Contrastive Emotional Nuances in Speech Synthesis**

Bryan Gautama Ngo, Mahdin Rohmatillah, and Jen-Tzung Chien

16:00-16:15

### **Indonesian-English Code-Switching Speech Synthesizer Utilizing Multilingual STEN- TTS and BERT LID**

Ahmad Alfani Handoyo, Chung Tran, Dessi Puji Lestari, and Sakriani Sakti

16:15-16:30

#### **Exemplar-based Methods For Mandarin Electrolaryngeal Speech Voice Conversion**

Hsin-Te Hwang, Chia-Hua Wu, Ming-Chi Yen, Yu Tsao, and Hsin-Min Wang

#### **Oral Session #4**

Time: Friday, October 18, 2024, 10:30 -11:45

#### **Best Paper Candidates**

Session Chair: Yu Taso, Academia Sinica, Taiwan

10:30-10:45

# **Proposal of Protocols For Speech Materials Acquisition And Presentation Assisted By Tools Based On Structured Test Signals**

Hideki Kawahara, Ken-Ichi Sakakibara, Mitsunori Mizumachi, and Kohei Yatabe

10:45-11:00

### **Exploring Impact of Prioritizing Intra-Singer Acoustic Variations on Singer Embedding Extractor Construction for Singer Verification**

Sayaka Toma, Tomoki Ariga, Yosuke Higuchi, Ichiju Hayasaka, Rie Shigyo, and Tetsuji Ogawa

11:00-11:15

### A Feedback-driven Self-improvement Strategy And Emotion-aware Vocoder For Emotional Voice Conversion

Zhanhang Zhang and Sakriani Sakti

11:15-11:30

#### ConvCounsel: A Conversational Dataset for Student Counseling

Po-Chaun Chen, Mahdin Rohmatillah, You Teng Lin, and Jen-Tzung Chien

11:30-11:45

#### Construction of Large Language Models for Taigi and Hakka Using Transfer Learning

Yen-Chun Lai, Yi-Jun Zheng, Wen-Han Hsu, Yan-Ming Lin, Cheng-Hsiu Cho, Chih-Chung Kuo, Chao-Shih Huang, and Yuan-Fu Liao

#### **Poster Session #1**

Time: Thursday, October 17, 2024, 14:00 -15:00

#### Language Acquisition, Pronunciation, and Speech Learning

#### P1-1

### A Parameter-efficient Multi-step Fine-tuning of Multilingual And Multi-task Learning Model for Japanese Dialect Speech Recognition

Yuta Kamiya, Shogo Miwa, and Atsuhiko Kai

P1-2

### A Study on The Acquisition of Triphthong Vowels by Altaic Chinese Learners Under The 'belt And Road' Initiative

Yuan Jia and Linjiao Pan

P1-3

#### Acoustic Realization of /s/ Across Accents Of Urdu

Iram Fatima and Sahar Rauf

P1-4

#### Age-related and Gender-related Differences in Cantonese Vowels

Wai-Sum Lee

P1-5

## An Investigation of Chinese Speech Under Alcohol Influence: Database Construction and Phonetic Analysis

Peppina Po-Lun Lee, Mosi He, and Bin Li

P1-6

#### **Analysis of Pathological Features for Spoof Detection**

Myat Aye Aye Aung, Hay Mar Soe Naing, Aye Mya Hlaing, Win Pa Pa, Kasorn Galajit, and Candy Olivia Mawalim

P1-7

#### Benchmarking Cognitive Domains for LLMs: Insights from Taiwanese Hakka Culture

Chen-Chi Chang, Ching-Yuan Chen, Hung-Shin Lee, and Chi-Cheng Lee

P1-8

### Clapping Hands To Word Stress Improves Children's L2 English Pronunciation Accuracy in A Word Imitation Task: Evidence from A Classroom Study

Meiyun Chen

P1-9

### Comparative Study on The Phonetic Characteristics of Chinese Vowels Between Kyrgyz and Kirgiz Learners

Yuan Jia and Mingshuai Yin

P1-10

### Computer-assisted Pronunciation Training System for Atayal, An Indigenous Language in Taiwan

Yu-Lan Chuang, Hsiu-Ray Hsu, Di Tam Luu, Yi-Wen Liu, and Ching-Ting Hsin

P1-11

#### **Continual Gated Adapter for Bilingual Codec Text-to-speech**

Li-Jen Yang and Jen-Tzung Chien

P1-12

#### Continual Learning in Machine Speech Chain Using Gradient Episodic Memory

Geoffrey Tyndall, Kurniawati Azizah, Dipta Tanaya, Ayu Purwarianti, Dessi Puji Lestari, and Sakriani Sakti

P1-13

### **Developing A Robust Mispronunciation Detection by Data Augmentation Based on Automatic Phone Annotation**

Jong In Kim, Sunhee Kim, and Minhwa Chung

P1-14

### **Developing A Thai Name Pronunciation Dictionary from Road Signs and Naming Websites**

Ausdang Thangthai

P1-15

#### Development of An English Oral Assessment System with The Gept Dataset

Hao Chien Lu, Chung-Chun Wang, Jhen-Ke Lin, and Berlin Chen

P1-16

### **Enhancing Indonesian Automatic Speech Recognition: Evaluating Multilingual Models with Diverse Speech Variabilities**

Aulia Adila, Dessi Puji, Ayu Purwarianti, Dipta Tanaya, Kurniawati Azizah, and Sakriani Sakti

P1-17

### **Enhancing Phoneme Recognition in The Bengali Language Through Fine-tuning of Multilingual Model**

Akash Deep, Puja Bharati, Sabyasachi Chandra, Debolina Pramanik, Korra Siva Naik, and Shayamal Kumar Das Mandal

P1-18

### **Exploration of Mongolian Word Stress Research Methods Based on Intonation Synthesis Technology**

Aomin, Dahu Baiyila and Aijun Li

P1-19

#### Fusion of Multiple Audio Descriptors for The Recognition of Dysarthric Speech

Komal Bharti and Pradip K. Das

P1-20

#### Gated Adapters with Balanced Activation for Effective Contextual Speech Recognition

Yu-Chun Liu, Yi-Cheng Wang, Li-Ting Pai, Jia-Liang Lu, and Berlin Chen

P1-21

#### Improving Speech Recognition by Enhancing Accent Discrimination

Hao-Tian Zheng and Berlin Chen

P1-22

#### Research on the Temporal Effect of Focus on Trisyllabic Sequences in Leizhou Min

Maolin Wang, Ying Liu, Han Yu, Ziyu Xiong, and Qiguang Lin

P1-23

#### Right-prominent Trisyllabic Tone Sandhi in Taifeng Chinese

Xiaoyan Zhang, Aijun LI, and Zhiqiang Li

P1-24

#### The Development of LOTUS-TRD: A Thai Regional Dialect Speech Corpus

Sumonmas Thatphithakkul, Kwanchiva Thangthai, and Vataya Chunwijitra

P1-25

### The Effectiveness of Audio-visual Feedback for L2 Chinese Sentence Stress Perception And Production

Xingzi Gao, Yujie Gao, and Sichang Gao

P1-26

#### **Unified Spoken Language Proficiency Assessment System**

Sunil Kumar Kopparapu and Ashish Panda

P1-27

### Using Automatic Speech Recognition for Speech Comprehension Evaluation in The Cochlear Implant

Hsin-Li Chang, Enoch Hsin-Ho Huang, Yi-Ching Wang, and Yu Tsao

#### **Poster Session #2**

Time: Thursday, October 17, 2024, 16:30 -17:30

#### Speech Technology, Machine Learning, and AI in Speech Processing

P2-1

### A Deep Learning Based Approach with Data Augmentation For Infant Cry Sound Verification

Namita Gokavi, Padala Sri Ramulu, Kandregula Nanda Kishore, Sunil Saumya, and Deepak K T

P2-2

# A Preliminary Study on End-to-end Multimodal Subtitle Recognition for Taiwanese TV Programs

Pei-Chung Su, Cheng-Hsiu Cho, Chih-Chung Kuo, Yen-Chun Lai, Yan-Ming Lin, Chao-Shih Huang, and Yuan-Fu Liao

P2-3

### A Preliminary Study on Taiwanese POS Taggers: Leveraging Chinese in The Absence Of Taiwanese POS Annotation Datasets

Chao-Yang Chang, Yan-Ming Lin, Chih-Chung Kuo, Yen-Chun Lai, Chao-Shih Huang, Yuan-Fu Liao, and Tsun-Guan Thiann

P2-4

#### Agent-Driven Large Language Models for Mandarin Lyric Generation

Hong-Hsiang Liu and Yi-Wen Liu

P2-5

### An Evaluation of Neural Vocoder-based Voice Cloning System for Dysphonia Speech Disorder

Dhiya Ulhaq Dewangga, Dessi Puji, Ayu Purwarianti, Dipta Tanaya, Kurniawati Azizah, and Sakriani Sakti

P2-6

#### An N-best List Selection Framework for ASR N-best Rescoring

Chen-Han Wu and Kuan-Yu Chen

P2-7

### Analysis and Detection of Differences in Spoken User Behaviors Between Autonomous and Wizard-of-oz Systems

Mikey Elmers, Koji Inoue, Divesh Lala, Keiko Ochi, and Tatsuya Kawahara

P2-8

### **Analysis and Discussion of Feature Extraction Technology for Musical Genre Classification**

Shu-Hua Chen, Wei-Ting Huang, Cheng-Hao Lai, Yu-Lun Lin, and Ming-Hsiang Su

P2-9

#### Annotation of Addressing Behavior in Multi-party Conversation

Keisuke Kadota, Seima Oyama, and Yasuharu Den

P2-10

#### **Benchmarking Clickbait Detection from News Headlines**

Ying-Lung Lin, Shao-Ying Lu, and Ling-Chih Yu

P2-11

### **Chunk Size Scheduling for Optimizing The Quality-latency Trade-off in Simultaneous Speech Translation**

Igbal Pahlevi Amin, Haotian Tan, Kurniawati Azizah, and Sakriani Sakti

P2-12

# **Comprehensive Benchmarking and Analysis of Open Pre-trained Thai Speech Recognition Models**

Pattara Tipakasorn, Oatsada Chatthong, Ren Yonehana, and Kwanchiva Thangthai

P2-13

### Depression Classification Using Log-mel Spectrograms: A Comparative Analysis of Window Size-based Data Augmentation and Deep Learning Models

Lokesh Kumar, Kumar Kaustubh, Shashaank Aswatha Mattur, and S. R. Mahadeva Prasanna

P2-14

#### Effects of Multiple Japanese Datasets for Training Voice Activity Projection Models

Yuki Sato, Yuya Chiba, and Ryuichiro Higashinaka

P2-15

### **Exploring Branchformer-based End-to-end Speaker Diarization with Speaker-wise VAD Loss**

Pei-Ying Lee, Hau-Yun Guo, Tien-Hong Lo, and Berlin Chen

P2-16

## IIIT-speech Twins 1.0: An English-Hindi Parallel Speech Corpora for Speech-to-speech Machine Translation And Automatic Dubbing

Anindita Mondal, Anil Vuppala, and Chiranjeevi Yarra

P2-17

#### Improving Real-Time Music Accompaniment Separation with MMDenseNet

Chun-Hsiang Wang, Chung-Che Wang, Jun-You Wang, Jyh-Shing Roger Jang, and Yen-Hsun Chu

P2-18

#### Infant Cry Verification With Multi-view Self-attention Vision Transformers

Kartik Jagtap, Namita Nagappa Gokavi, and Sunil Saumya

P2-19

### Modeling Response Relevance Using Dialog Act and Utterance-design Features: A Corpus-based Analysis

Mika Enomoto, Yuichi Ishimoto, and Yasuharu Den

P2-20

#### **Multi-resolution Singing Voice Separation**

Yih-Liang Shen, Ya-Ching Lai, and Tai-Shih Chi

P2-21

#### Multilingual speech translator for medical consultation

Zhe-Jia Xu, Yeou-Jiunn Chen, and Qian-Bei Hong

P2-22

### Overcoming The Impact Of Different Materials On Optical Microphones for Speech Capture Using Deep Learning Integrated Training Data

Yi-Hao Jiang, Jia-Hui Li, Jia-Wei Chen, Yi-Chang Wu, and Ying-Hui Lai

P2-23

### Robust Audio-visual Speech Enhancement: Correcting Misassignments in Complex Environments With Advanced Post-processing

Wenze Ren, Kuo-Hsuan Hung, Rong Chao, YouJin Li, Hsin-Min Wang, and Yu Tsao

P2-24

#### Singer Separation for Karaoke Content Generation

Hsuan-Yu Lin, Xuanjun Chen, and Jyh-Shing Roger Jang

P2-25

#### **Uncertainty-based Ensemble Learning for Speech Classification**

Bagus Tris Atmaja, Akira Sasou, and Felix Burkhardt

P2-26

#### A Neural Machine Translation System for The Low-resource Sixian Hakka Language

Yi-Hsian Hung and Yi-Chin Huang

### Keynote Speakers



#### **Learning Towards Generative and Conversational AI**

Speaker: Prof. Jen-Tzung Chien (https://iece.dee.nycu.edu.tw/teachers.php?

#### pa=getItem&teacher\_id=124&locale=tw)

Lifetime Chair Professor, National Yang Ming Chiao Tung University

Session Chair: Hsin-Min Wang, Academia Sinica, Taiwan

#### **Biography:**

Jen-Tzung Chien received his Ph.D. degree in electrical engineering from National Tsing Hua University, Hsinchu, Taiwan, in 1997, and is currently the Lifetime Chair Professor in National Yang Ming Chiao Tung University, Hsinchu, Taiwan. He has authored more than 250 peer-reviewed articles in machine learning, deep learning, and Bayesian learning with applications on speech and natural language processing, and three books including Bayesian Speech and Language Processing, Cambridge University Press, 2015, Source Separation and Machine Learning, Academic Press, 2018, and Machine Learning for Speaker Recognition, Cambridge University Press, 2020. He was a Tutorial Speaker of AAAI, IJCAI, ACL, KDD, ICASSP, COLING and Interspeech. He received the Best Paper Award in IEEE Workshop on Automatic Speech Recognition and Understanding in 2011, and IEEE International Workshop on Machine Learning for Signal Processing in 2023.

#### **Abstract:**

Spoken dialogue systems have become crucial to build a wide range of virtual assistants for customer service, entertainment and health. These systems are composed of various components including automatic speech recognition, text-to-speech, and natural language generation, which involve delicate multimodal machine learning towards multilingual generative models. This talk will focus on state-of-the-art generative models in individual components and address how the pre-trained foundation models are utilized to re-shape the architecture via adapters, re-function the foundation via prompting and re-program the dialogue via flow control. We will also explore the challenges and opportunities through learning and integrating these components into a comprehensive conversation system.



# <u>Language-Universal Speech Processing: Lessons learned from ASAT and Large Pretrained Models with Extensions to Multilingual ASR (Keynote\_Chin-Hui Lee.pdf)</u> Speaker: Prof. <u>Chin-Hui Lee (https://chl.ece.gatech.edu/)</u>

IEEE & ISCA Fellow, Georgia Tech

Session Chair: Yu Tsao, Academia Sinica, Taiwan

#### **Biography:**

Chin-Hui Lee is a professor at School of Electrical and Computer Engineering, Georgia Institute of Technology. Before joining academia in 2001, he had accumulated 20 years of industrial experience ending in Bell Laboratories, Murray Hill, as the Director of the Dialogue Systems Research Department. Dr. Lee is a Fellow of the IEEE and a Fellow of ISCA. He has published 30 patents and about 600 papers, with more than 55,000 citations and an h-index of 80 on Google Scholar. He received numerous awards, including the Bell Labs President's Gold Award for speech recognition products in 1998. He won the SPS's 2006 Technical Achievement Award for "Exceptional Contributions to the Field of Automatic Speech Recognition". In 2012 he gave an ICASSP plenary talk on the future of automatic speech recognition. In the same year he was awarded the ISCA Medal in Scientific Achievement for "pioneering and seminal contributions to the principles and practice of automatic speech and speaker recognition". His two pioneering papers on deep regression accumulated over 2200 citations and won a Best Paper Award from IEEE Signal Processing Society in 2019.

#### **Abstract:**

With recent advances in deep neural networks and large pre-trained models, the baseline performances for automatic speech recognition (ASR) of resource-rich languages have improved a great deal. However, only a few applications have been deployed in our daily life. Part of the reason was due to past black-box approaches to ASR without leveraging upon speech knowledge sources, resulting in unsatisfactory recognition results in many situations. On the other hand, knowledge-based approaches, such as automatic speech attribute transcription (ASAT), were not practiced in the machine-learning community due to difficulties to integrate speech knowledge into building ASR system. Since speech attributes are usually language-universal, they serve as an ideal set of fundamental units to build speech models. They also share common distinct features among different languages such that good models can also be established for speech processing to detect speech cues needed to correct unexpected ASR results. In this talk, we will discuss ways the O-COCOSDA community can contribute to developing robust multilingual ASR systems for many resource-limited languages in this region.



#### Recent trends in speech translation

Speaker: Prof. Satoshi Nakamura (https://sds.cuhk.edu.cn/en/teacher/1185)

Professor, Chinese University of Hong Kong, Shenzhen

Session Chair: Chin-Hui Lee, Georgia Tech, USA

#### **Biography:**

Dr. Satoshi Nakamura is a full professor at The Chinese University of Hong Kong, Shenzhen. He is also a professor emeritus at Nara Institute of Science and Technology (NAIST) and Honorarprofessor of Karlsruhe Institute of Technology, Germany. He received his B.S. from Kyoto Institute of Technology in 1981 and Ph.D. from Kyoto University in 1992. He was an Associate Professor in the Graduate School of Information Science at NAIST from 1994-2000. He was Department head and Director of ATR Spoken Language Communication Research Laboratories in 2000-2004, and 2005-2008, respectively, and Vice president of ATR in 2007-2008. He was Director General of Keihanna Research Laboratories and the Executive Director of Knowledge Creating Communication Research Center, National Institute of Information and Communications Technology, Japan 2009-2010. He moved to Nara Institute of Science and Technology as a full professor in 2011. He established the Data Science Center at NAIST and was a director from 2017 to 2021. He also served as a team leader of the Tourism Information Analytics Team at the AIP center of RIKEN Institute, Japan, from 2017-2021. He is currently a full professor at The Chinese University of Hong Kong, Shenzhen, China. His research interests include modeling and systems of spoken language processing, speech processing, spoken language translation, spoken dialog systems, natural language processing, and data science. He is one of the world leaders in speech-to-speech translation research. He has been serving various speech-to-speech translation research projects, including C-Star, A-Star, and the International Workshop on Spoken Language Translation IWSLT. He is currently the chairperson of ISCA SIG SLT (Spoken Language Translation). He also contributed to the standardization of the network-based speech translation at ITU-T. He was a committee member of IEEE SLTC 2016-2018. He was an Elected Board Member of the International Speech Communication Association, ISCA, from 2012 to 2019. He received the Antonio Zampolli Prize in 2012 and retained the title of IEEE Fellow, ISCA Fellow, IPSJ Fellow, and ATR Fellow.

#### **Abstract:**

After long research, speech translation technology has reached the level of providing a service using a smartphone. However, there are still various problems in realizing automatic simultaneous interpretation that produces the interpretation output before the end of the utterance. In this talk, I will introduce the recent research activities on automatic simultaneous speech translation and the

simultaneous speech translation system developed for IWSLT shared tasks. The talk also includes research activities on speech translation, preserving para-linguistic information, and utilizing the pretrained Large Language Models.

### SanXia+YingGe Culture Tour