

Conference
PROGRAMME BOOK
IALP 2025

the **29TH** *International Conference on*
ASIAN LANGUAGE PROCESSING

*Bridging Culture Diversities Innovation
in Asian Language Processing*

4TH - 6TH AUGUST 2025

**BORNEO CULTURES MUSEUM
KUCHING, SARAWAK**



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CONTENTS

<i>Message from the Minister</i>	4
<i>Message from the Vice Chancellor, UNIMAS</i>	5
<i>Message from the Dean</i>	6
<i>Message from the Conference Chairs (IALP'25)</i>	7
<i>IALP'25 Organising Committee</i>	8
<i>Plenary Speaker</i>	10
<i>Keynote Speaker</i>	12
<i>Conference Programme</i>	14
<i>Quick Venue Guide</i>	18



MESSAGE FROM THE MINISTER

Yang Berhormat Dato Sri Roland Sagah Wee Inn
Minister of Education, Innovation and Talent
Development, Sarawak

Salam Sejahtera and warm greetings to all esteemed guests, speakers, and participants,

It is an honor to address you at the 14th International Conference on Information Technology in Asia (CITA '25) and the 29th International Conference on Asian Language Processing (IALP '25). This gathering reflects our commitment to education, innovation, and technology, marking a significant step toward Sarawak's vision of becoming a high-income state by 2030.

As we navigate the complexities of the Digital Era, Sarawak faces both challenges and opportunities. The rapid growth of artificial intelligence (AI) offers us unmatched potential to advance our digital transformation and develop human capital. By harnessing AI, we can foster innovative, creative, and critical thinking skills among our youth.

Our government is dedicated to bridging the digital divide, ensuring that all Sarawakians, particularly in rural areas, can participate in the digital economy. This initiative is part of the Sarawak Digital Economy Strategy 2018-2022, aimed at integrating digital technologies across various sectors.

Education is the cornerstone of our progress. Collaborating closely with Malaysia's Ministry of Education, we promote STEM education and enhance English language proficiency to prepare our youth for future workforce demands. The IALP conference highlights the importance of language in cultural preservation and communication, reinforcing our diverse heritage.

CITA 2025's theme, "Embracing Disruptive Technologies for a Transformative Digital Future," provides a vital platform for industry and academia to converge. By fostering collaborations, we pave the way for innovative solutions to real-world challenges.

As we embark on this journey of digital transformation, we must prioritize sustainable development and social inclusivity. By investing in education and talent development, we prepare our youth to become leaders and innovators, shaping Sarawak's future.

I encourage all of you to engage in meaningful discussions and collaborate on solutions that will lead Sarawak toward a prosperous and inclusive future.

Thank you, and I wish you all a successful and inspiring conference.



MESSAGE FROM THE VICE CHANCELLOR, UNIMAS

YBhg Prof. Dr. Ahmad Hata Rasit

Assalamu'alaikum, Warahmatullahi Wabarakatuh, and Salam UNIMAS Lestari.

Welcome to the 14th International Conference on Information Technology in Asia (CITA 2025) and the 29th International Conference on Asian Language Processing (IALP 2025)! It's a real honour for UNIMAS to host these important events, especially since we're part of the BIMP-EAGA Knowledge Bridge.

This year, UNIMAS is super excited to be part of the BIMP-EAGA initiative. It's all about sharing knowledge and working together on research projects among the member countries. The Knowledge Bridge is like a mobility program that helps strengthen cultural and academic ties, especially in Computer Science and Information Technology. This is all in line with the BIMP-EAGA Vision 2025, which says that digital connectivity and innovation are key to regional development.

At the Faculty of Computer Science and Information Technology, we're committed to tackling real-world challenges through seven dynamic research clusters. These initiatives have gotten us some great grants and recognition, which shows how dedicated we are to innovation and collaboration.

CITA and IALP are not just conferences; they're platforms where we can share ideas and learn from each other. We see these events as ongoing conversations within the BIMP-EAGA community, building a global network of researchers and industry leaders who are all about driving progress.

Let's make the most of this opportunity to inspire each other and shape a better digital future together. I wish you all a fantastic and inspiring conference.

Thank you.



MESSAGE FROM THE DEAN

Prof. Dr. Jane Labadin

It is with great pleasure that we welcome you to the 14th International Conference on Information Technology and Multimedia (CITA 2025) and the 29th International Conference on Asian Language Processing (IALP 2025), hosted jointly for the first time by Universiti Malaysia Sarawak (UNIMAS) in the culturally vibrant land of Sarawak.

This joint gathering of CITA and IALP marks a significant milestone—uniting two dynamic academic communities under one roof to spark meaningful dialogue, foster cross-disciplinary research, and explore transformative innovations at the intersection of information technology, multimedia, and languages.

CITA 2025 carries forward its commitment to shaping future societies through digital innovation. Guided by the theme “Embracing Disruptive Technologies for a Transformative Digital Future”, the conference aims to highlight forward-thinking solutions in areas of Computing such as AI, IoT, multimedia systems, and smart technologies that will define the next wave of human advancement.

In parallel, IALP 2025, held in collaboration with the Chinese and Oriental Languages Information Processing Society (COLIPS), serves as a vital platform for advancing research in computational linguistics, natural language processing, and speech technologies. It seeks to preserve and promote Asia's rich linguistic diversity while bridging the gap between language and digital society.

We are deeply honoured by the participation of renowned plenary, keynote, and invited speakers. Their expertise, along with the contributions of our global participants, will no doubt enrich our shared journey of knowledge, innovation, and collaboration.

To all attendees, we invite you to immerse yourselves fully in the sessions, connect across disciplines, and experience the warmth and hospitality of Sarawak.

Welcome to CITA 2025 and IALP 2025—may your time here be inspiring, fruitful, and unforgettable.

MESSAGE FROM THE CONFERENCE CHAIRS



Dr. Suhaila Saeed



Dr. Minghui Dong



Dr. Mohd Helmy bin Abd Wahab

Welcome to the International Conference on Asian Language Processing 2025 (IALP 2025)!

For many of you, this may be your first visit to Borneo, the world's third-largest island. We are delighted to bring IALP back to Kuching, Sarawak, Malaysia, affectionately known as the Land of the Hornbill, following our successful conference here in 2014. On behalf of the organizers, the Chinese and Oriental Languages Information Processing Society (COLIPS), Singapore, and Universiti Malaysia Sarawak (UNIMAS), Malaysia, we extend our warmest welcome to all participants.

IALP is the flagship event of COLIPS, an annual academic forum dedicated to advancing Asian language processing, with a particular focus on under-resourced languages, including many indigenous to Borneo. First launched in 1986 in Singapore as the International Conference on Chinese Computing (ICCC), IALP has grown into a premier international platform for researchers in computational linguistics and natural language processing.

IALP 2025 offers an exciting and diverse program that reflects the breadth and depth of current research in Asian language processing. We are honored to feature a plenary talk by Mr. Khalil Nooh, CEO of Mesolitica, who will share insights into the development of MaLLaM, Malaysia's first fully localized large language model. In addition, Professor Zhizheng Wu from the Chinese University of Hong Kong, Shenzhen, will deliver a keynote address on reinforcement learning for text-to-speech synthesis.

The technical program encompasses a wide range of topics, including speech recognition, large language models, machine translation, linguistic theory, and language education. We are pleased to welcome authors and participants from more than ten countries and regions, underscoring the international scope and collaborative spirit of the conference.

All accepted papers will be published in the official digital proceedings of IALP 2025 in the IEEE Xplore Digital Library. We are deeply grateful to our technical sponsors, the IEEE Singapore Systems, Man and Cybernetics (SMC) Chapter, and the IEEE Malaysia SMC Chapter, for their invaluable support.

We also extend our sincere thanks to Business Events Sarawak, under the Sarawak Convention Bureau (SCB), for their generous financial sponsorship, which has played a key role in making this event possible.

Finally, we express our heartfelt appreciation to the organizing committee for their dedication and tireless efforts in bringing IALP 2025 to fruition. We wish all delegates a rewarding conference experience and a memorable stay in Kuching.

ORGANISING COMMITTEE

Honorary Chair	Prof Haizhou Li, COLIPS & IEEE SP Society
Conference Chairs	Dr Suhaila Saeed, UNIMAS Dr Mohd Helmy bin Abd Wahab, IEEE Malaysia SMC Chapter Dr Minghui Dong, COLIPS
Co-Chair	Rosita Mohamed Othman, UNIMAS
Secretary	Jennifer Fiona Wilfred Busu, UNIMAS
Technical Program Chairs	Dr Sarah Flora Samson Juan, UNIMAS Dr Szalinsyah bin Razali, IEEE Malaysia SMC Chapter Dr Lei Wang, IEEE Singapore SMC Chapter Prof Rong Tong, COLIPS
Publication Chairs	Dr Tan Ping Ping, UNIMAS Dr Yanfeng Lu, COLIPS
Event Chairs	Dr Norfadzlan Yusup, UNIMAS Dr Mohammad Hossin, UNIMAS
Finance Chairs	Juliana Linang, UNIMAS Atiqah Nadzirah Abdull Rahim, UNIMAS Dr Yan Wu, IEEE Singapore SMC Chapter
Sponsorship Chairs	Dr Chiu Po Chan, UNIMAS Hamizan Sharbini, UNIMAS
Publicity and Registration Chairs	Dr Norlifah Annuar, UNIMAS Noor Hazlini Borhan, UNIMAS Prof Zhengchen Zhang, COLIPS Dr Paul Chan, COLIPS Dr Tianchi Liu, Tencent, Singapore

ORGANISING COMMITTEE

Multimedia Chairs	Nurfauza Jali, UNIMAS
Protocol and Souvenir Chairs	Seleviawati Tarmizi, UNIMAS Eaqerzilla Phang, UNIMAS
Administrative Supports	Hjh Hadijah Morni, UNIMAS Cynthia Joseph Jiken, UNIMAS Siti Nor Aishah Bujang, UNIMAS Norashikin Fauzi, UNIMAS Sendi Tangan, UNIMAS
Technical Support	Wan Hosen Wan Shekh, UNIMAS Mohamad Arif Ibrahim, UNIMAS Mohamad Shahril Berdam, UNIMAS Zulhilmi Roslan, UNIMAS Muhamad Izuwan Morni, UNIMAS Razeki Jelihi, UNIMAS
Social Event Chairs	Abdul Rahman Mat, UNIMAS Mohamad Johan Ahmad Khiri, UNIMAS

PLENARY SPEAKER

Ahmad Khalil bin Mohamad Nooh

Mesolitica's Journey in Developing Malaysia's Large Language Model (MaLLaM 🌙)

This presentation explores the groundbreaking journey of Mesolitica, a Malaysian AI startup, in developing MaLLaM 🌙, Malaysia's first culturally relevant Large Language Model (LLM). Originating from the Malaya open-source Natural Language Toolkit (NLTK) for Bahasa Melayu, Mesolitica has evolved into a leading player in local AI innovation, leveraging open-source technologies in the space of Large Language Models and partnership with Amazon Web Services (AWS). Mesolitica's continued engagement with the Ministry of Digital Malaysia underscore its commitment to AI sovereignty, focusing on data privacy, technological independence, and ethical AI adoption. The presentation will also discuss the open-source contributions of Mesolitica, including models and datasets hosted on Hugging Face, and its vision for empowering Malaysia's AI ecosystem through talent development and applied research. This presentation aims to inspire academic audiences by showcasing the transformative potential of localized AI models in fostering innovation, cultural relevance, and technological independence in emerging markets.



BIOGRAPHY

Khalil Nooh has over 22 years of professional experience in the tech industry with projects in Malaysia, Indonesia, The Philippines and Ukraine. In 2016, he founded his first tech startup Dropshipping.co which got him into the Stanford University Go2Market program together in MaGIC Cyberjaya. Today, he is the Co-Founder and CEO of Mesolitica, a deep-tech startup that trains narrow AIs to understand Bahasa Melayu. Currently, Mesolitica is developing a business chatbot called "Nous" (pronounced "nows"), powered by MaLLaM 🌙 (Malaysia Large Language Model), which provides conversational AI capabilities for SMEs and enterprises through oriented-task chatbots, voice assistants, and digital avatars - getting ready for the Metaverse. Mesolitica is working closely with both NVIDIA and AWS to bring localized Large Language Model to enterprise production systems in Malaysia.

KEYNOTE SPEAKER

Prof. Wu Zhizheng

Reinforcement Learning for text-to-speech synthesis

Reinforcement Learning (RL) is emerging as a powerful paradigm for refining Text-to-Speech (TTS) systems, moving beyond standard supervised training to fine-tune nuanced qualities like naturalness and expressiveness. While these methods improve general performance, they often fail to address specific, critical flaws. One of the most significant challenges for modern zero-shot TTS is maintaining intelligibility, especially for difficult inputs like tongue twisters, repeated words, cross-lingual prompts, or code-switching. This talk will explore how targeted preference alignment, a form of RL, can solve these issues. We present a case study based on the paper "Advancing Zero-shot Text-to-Speech Intelligibility across Diverse Domains via Preference Alignment." The approach introduces a new Intelligibility Preference Speech Dataset (INTP) and extends the Direct Preference Optimization (DPO) framework for TTS. Alignment with INTP significantly boosts intelligibility and enhances overall speech quality. We also demonstrate weak-to-strong generalization, improving even state-of-the-art models, and show the potential for iterative refinement. This work highlights a strategic shift from general enhancement to precisely correcting flaws, charting a path toward truly robust and reliable TTS.



BIOGRAPHY

Professor Wu Zhizheng is currently an Associate Professor at The Chinese University of Hong Kong, Shenzhen. He holds the position of Deputy Director at the Shenzhen Key Laboratory of CrossModal Cognitive Computing. Professor Wu has been consistently listed in Stanford University's "World's Top 2% Scientists" and has received multiple Best Paper Awards. He earned his Ph.D. from Nanyang Technological University and has held research and leadership roles at internationally renowned institutions, including Meta (formerly Facebook), Apple, the University of Edinburgh, and Microsoft Research Asia. Professor Wu has initiated several influential open-source projects, such as Merlin, Amphion, and Emilia, which have been adopted by over 700 organizations worldwide, including OpenAI. Notably, Amphion has topped GitHub's trending list multiple times, while Emilia has become the most popular audio dataset (Most Liked) on HuggingFace. He also initiated and organized the first ASVspoof Challenge and the first Voice Conversion Challenge and served as the organizer of the Blizzard Challenge 2019, a prestigious international speech synthesis competition. Currently, Professor Wu serves on the editorial boards of IEEE/ACM Transactions on Audio, Speech and Language Processing and IEEE Signal Processing Letters, and is the General Chair of the IEEE Spoken Language Technology Workshop 2024.

DAY 0 – 4TH AUGUST 2025

Time	Activity	Location
	Sarawak River Cruise	Waterfront Kuching
16:30 – 17:00	Registration	Jetty Area
17:00 – 17:30	Boarding Time	Jetty Area
17:30 – 19:00	Cruise Time	On board

Note: For IALP25 & Knowledge Bridge Program participants only

CONFERENCE PROGRAMME: DAY 1 (5TH AUGUST 2025)

Time	Activity	Venue
08:00 – 09:00	Registration, Arrival of participants & Dean of FCSIT	Borneo Cultural Museum Foyer
09:00 – 09:30	Breakfast at Museum Restaurant	
09:30 – 09:35	Housekeeping Announcement	Auditorium
09:35	Welcoming Speech by Professor Dr. Jane Labadin, Dean of FCSIT & Conference Advisor The 14th International Conference on Information Technology in Asia (CITA) 2025	Auditorium
09:50	Photo Session	Auditorium
10:00 – 11:00	CITA25 Plenary Session Connecting the Dots in Trustworthy AI: Bridging Ethics, Regulation, and Explainability for ASEAN's Digital Future by Prof Ts Dr Ali Selamat, Deputy Vice Chancellor of Universiti Teknologi Malaysia (UTM)	Auditorium
11:00 – 12:00	IALP25 Plenary Session Mesolitica's Journey in Developing Malaysia's Large Language Model (MaLLaM 🍌) by Mr Ahmad Khalil bin Mohamad Nooh (Khalil Nooh), Co-Founder and CEO of Mesolitica	Auditorium
12:00 – 13:00	Lunch at Museum Restaurant	
13:00 – 15:00	Parallel Session 1	Func-Room A Func-Room B
15:00 – 15:20	Tea Break at Museum Restaurant	
15:20 – 17:00	Parallel Session 2	Func-Room A Func-Room B
	Poster Presentation · Judging Time (13:00 – 16:00)	Func-Room B
17:00	End of Day 1	

Note: Func-Room A & Func-Room B at Level 1

CONFERENCE PROGRAMME: DAY 2 (6TH AUGUST 2025)

Time	Activity	Venue
08:20 – 10:00	Parallel Session 3	Func-Room A Func-Room B
10:00 – 10:30	Morning Break at Museum Restaurant	
10:30 – 11:30	Keynote Session Reinforcement Learning for Text-to- speech Synthesis by Professor Wu Zhizheng, The Chinese University of Hong Kong, Shenzhen	Func-Room A
11:40 -13:00	Parallel Session 4	Func-Room A Func-Room B
13:00 – 14:00	Lunch at Museum Restaurant	
14:00 – 15:40	Parallel Session 5	Func-Room A Func-Room B
15:40 – 16:00	Tea Break at Museum Restaurant	
16:00 – 16:30	IALP25 Handing Over Ceremony	Func-Room A
16:30	End of Conference	

Note: Func-Room A & Func-Room B at Level 1

LAUNCHING CEREMONY AND DINNER EVENT**The 29th International Conference on Asian Language Processing (IALP'25)****Date:** 5th August 2025, Tuesday**Venue:** Ranyai Ballroom, The Waterfront Hotel**Time:** 7:00 pm- 10:30 pm

7.00 pm	Arrival of Invited Guests
7.10 pm	Arrival of Yang Berbahagia Profesor Dr. Ahmad Hata bin Rasit Vice Chancellor, Universiti Malaysia Sarawak (UNIMAS)
7.20 pm	Arrival of Yang Berhormat Dato Sri Roland Sagah Wee Inn Minister of Education, Innovation and Talent Development, Sarawak
7.30 pm	"Negaraku" and "Ibu Pertiwiku" Do'a Recital Welcoming Remarks by <i>Professor Haizhou Li</i> President of Chinese and Oriental Languages Information Processing Society (COLIPS) & IEEE Signal Processing Society and Honorary Chair of The 29th International Conference on Asian Language Processing (IALP) 2025 Distinguished Speech by <i>Yang Berbahagia Profesor Dr. Ahmad Hata bin Rasit</i> Vice Chancellor, Universiti Malaysia Sarawak (UNIMAS) Inaugural Speech and Launching by <i>Yang Berhormat Dato Sri Roland Sagah Wee Inn</i> Minister of Education, Innovation and Talent Development, Sarawak Launching Gimmick and Montage Dinner Performances and Activities Token of Appreciation Conference Award Presentation Souvenir Presentation Photo Session
10.30 pm	End of Event

FLOOR PLAN (BORNEO CULTURES MUSEUM) LEVEL 1

Etika Muzium Museum Etiquette

Selamat datang ke Borneo Cultures Museum. Kami berharap agar setiap pengunjung boleh memberi kerjasama bagi memastikan keselesaan semua. Keselamatan pengunjung dan artifak dalam bangunan ini adalah keutamaan kami.

Welcome to the Borneo Cultures Museum. Help make the museum as pleasant as possible for every visitor. We prioritise the safety of visitors and artefacts in this building.

- | | | | |
|---|---|---|--|
|  | Dilarang merokok
No smoking |  | Dilarang membawa haiwan peliharaan
No pets |
|  | Dilarang menyentuh objek
No touching of objects |  | Dilarang membawa objek tajam
No sharp objects |
|  | Dilarang membawa makanan, minuman atau gula-gula getah
No food, drinks or gums |  | Dilarang mengambil gambar menggunakan flash atau tripod
No flash photography or tripods |
|  | Dilarang membawa payung
No umbrellas |  | Amalkan penjarakan sosial
Practise social distancing |
|  | Dilarang berlari, menolak atau berasak-asak
No running, pushing or shoving |  | Kanak-kanak bawah 12 tahun memerlukan pengawasan orang dewasa
Children under 12 must be accompanied by an adult |

ARAS
LEVEL

1

Lobi
Lobby



Petunjuk Legend

- | | | | |
|---|---|---|---|
|  | Tangga Kecemasan
Emergency Stairs |  | Kaunter Informasi
Information Counter |
|  | Tandas
Toilet |  | Kaunter Tiket
Ticket Counter |
|  | Bilik Penjagaan Bayi
Nursing Room |  | Bilik Lokar
Locker Room |
|  | Lif
Elevator |  | Surau
Prayer Room |
|  | Kedai Cenderamata
Museum Shop |  | Bilik Rawatan Kecemasan
First Aid Room |
|  | Restoran / Kantin
Restaurant / Canteen | | |

FLOOR PLAN (THE WATERFRONT HOTEL)

