

Tan Dat Nguyen

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Daejeon, Korea

OBJECTIVE

PhD student at KAIST specializing in efficient speech/audio generative models.

SKILLS

- **Programming Languages:** Python, C/C++, and others
- **Background:** Machine Learning, Speech Processing, Speech Synthesis, Text-to-Speech
- **Deep Learning Libraries:** Hugging Face, fairseq, etc. (quick to adapt)

WORK EXPERIENCE

- **OLLI Technology Corp** [[globe](#)]
Research Intern & TTS Researcher 07/2021 - 02/2023
Ho Chi Minh City, Vietnam
- **Ho Chi Minh University of Technology (VNU)**
Teaching Assistant 01/2021 - 02/2022
Ho Chi Minh City, Vietnam

EDUCATION

- **Korea Advanced Institute of Science and Technology (KAIST)**
Ph.D. Student Mar 2025 - Present
Daejeon, Korea
- **Korea Advanced Institute of Science and Technology (KAIST)**
M.S., Electrical Engineering Feb 2023 - Feb 2025
Daejeon, Korea
- **Ho Chi Minh University of Technology (HCMUT)**
M.S., Computer Science (dropped after one year) Sep 2020 - 2022
Ho Chi Minh City, Vietnam
- **Ho Chi Minh University of Technology (HCMUT)**
B.S., Computer Science Aug 2018 - Nov 2022
Ho Chi Minh City, Vietnam
- **Nguyen Chi Thanh High School for the Gifted**
Mathematics Program Aug 2015 - Jun 2018
Dak Nong, Vietnam

PUBLICATIONS C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, A=PREPRINT, *=EQUAL CONTRIBUTION

- [C.10] Tan Dat Nguyen, Sangmin Bae, Joon Son Chung, Ji-Hoon Kim. **MamTra: A Hybrid Mamba-Transformer Backbone for Speech Synthesis**. Submitted to Interspeech 2026. [[Project page](#)][[gh](#)]
- [C.9] Tan Dat Nguyen, Jaehun Kim, Ji-Hoon Kim, Shukjae Choi, Youshin Lim, Joon Son Chung. **SPADE: Structured Pruning and Adaptive Distillation for Efficient LLM-TTS**. ICASSP 2026 (**Oral Presentation**). [[Project page](#)]
- [C.8] The Hieu Pham*, Tan Dat Nguyen*, Phuong Thanh Tran, Joon Son Chung, Duc Dung Nguyen. **MAGE: A Coarse-to-Fine Speech Enhancer with Masked Generative Model**. ICASSP 2026. [[Live Demo](#)]
- [C.7] Tan Dat Nguyen, Ji-Hoon Kim, Jeongsoo Choi, Shukjae Choi, Jinseok Park, Younglo Lee, Joon Son Chung. **Accelerating Codec-based Speech Synthesis with Multi-Token Prediction and Speculative Decoding**. In ICASSP 2025. [[Demo](#)]
- [C.6] Jaehun Kim, Ji-Hoon Kim, Yeunju Choi, Tan Dat Nguyen, Seongkyu Mun, Joon Son Chung. **AdaptVC: High Quality Voice Conversion with Adaptive Learning**. In ICASSP 2025. [[Demo](#)]
- [C.5] Jaemin Jung*, Junseok Ahn*, Chaeyoung Jung, Tan Dat Nguyen, Youngjoon Jang, Joon Son Chung. **VoiceDiT: Dual-Condition Diffusion Transformer for Environment-Aware Speech Synthesis**. In ICASSP 2025. [[Demo](#)][[gh](#)]
- [A.1] The Hieu Pham, Nguyen Tan Dat, Phuong Thanh Tran, Duc Dung Nguyen. **Wanna Hear Your Voice: Adaptive, Effective, and Language-Agnostic Approach in Voice Extraction**. ArXiv. [[Live Demo](#)]

- [C.4] **Tan Dat Nguyen***, Ji-Hoon Kim*, Youngjoon Jang, Jaehun Kim, Joon Son Chung. **FreGrad: Lightweight and Fast Frequency-aware Diffusion Vocoder**. In *ICASSP 2024 (Oral Presentation)*. [Demo] [[gh]][[gh]]
- [C.3] **Tan Dat Nguyen**, Quang Tuong Lam, Duc Hao Do, Huu Thuc Cai, Hoang Suong Nguyen, Thanh Hung Vo, Duc Dung Nguyen. **A Linguistic-based Transfer Learning Approach for Low-resource Bahnar Text-to-Speech**. In *IEEE NICS 2022 (Oral Presentation)*. [Demo] [[gh]]
- [C.2] **Nguyen Tan Dat**, Lam Quang Tuong, Nguyen Duc Dung. **Calib-StyleSpeech: Zero-shot Voice Cloning with Imbalanced Datasets**. In *ICABDE 2021 (Oral Presentation)*. [Demo]
- [C.1] Tuong Q. Lam, Dung D. Nguyen, **Dat T. Nguyen**, Han K. Lam, Thuc H. Cai, Suong N. Hoang, Hao D. Do. **Instance-based Transfer Learning for Vietnamese Speech Synthesis with Very Low Resource**. In *FICC 2022*.

PROJECTS

- **FPT Digital Race Contest: Road and Traffic Sign Detection for Simulated Autonomous Driving** 2020
SVM, Hough Transform, Gaussian Mixture Models

HONORS AND AWARDS

- **CMK Foundation Global Scholarship** 2025
- **KAIST Scholarship (Full tuition and fees) – PhD Course** 2025
- **KAIST Scholarship (Full tuition and fees) – Master Course** 2024
- **Certificate of Merit for high achievements in academic competitions and research** 2022
- **First Prize, Poster Competition 2021–2022** 2022
- **Top 3, FPT Digital Racing University Qualifier** 2019
- **Vallet Scholarship** 2018
- **Third Prize, Vietnam Mathematical Olympiad (VMO 2018)** 2018
- **Silver Medal, Mathematical Olympiad 30/04** 2017
- **Bronze Medal, Mathematical Olympiad 30/04** 2016
- **Third Prize, Ha Noi Open Mathematics Competition** 2015

PROFESSIONAL MEMBERSHIPS

- **ML4U – AITech Lab**, Alumni
- **TickLab**, Alumni

CERTIFICATIONS

- **TOEIC 930 (English Proficiency)** *Valid until 2024*

ADDITIONAL INFORMATION

Hobbies & Habits: Music, Reading, Badminton, Running, Gym, MOBA (League of Legends), Violin

REFERENCES

1. **Joon Son Chung**
Associate Professor
KAIST
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Relationship: PhD Advisor at KAIST