

Hien Ohnaka

Engineer

✉ ohnaka.hien@gmail.com 📍 Japan 🌐 i17oonaka-h ✖ nehi_h

Profile

Full-time engineer at LY Corporation, Japan.

Experience

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| LY Corporation , Full-time Engineer | Japan
Apr 2026 – present
4 months |
| LY Corporation R&D , Part-time Researcher <ul style="list-style-type: none">Improved phonemic and prosodic annotation models for text-to-speech; the work was accepted to Interspeech 2025.Researched neural vocoders for high-quality speech generation from self-supervised speech features; the work was accepted to ICASSP 2026. | Japan
Dec 2024 – Mar 2026
1 year 4 months |
| NTT Communication Science Laboratories , Research Intern <ul style="list-style-type: none">Researched post-refinement of ASR hypotheses for joint multi-channel distant speech recognition. | Japan
Feb 2025 – Mar 2025
1 month |
| LY Corporation R&D , Research Intern <ul style="list-style-type: none">Improved phonemic and prosodic annotation models for text-to-speech and related subtasks. | Japan
Aug 2024 – Oct 2024
3 months |
| The University of Tokyo , Research Intern <ul style="list-style-type: none">Researched environmental sound synthesis from visual onomatopoeia; the work was accepted to ICASSP 2023. | Japan
June 2022 – July 2022
2 months |

Education

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| M.S. Nara Institute of Science and Technology , Information Science <ul style="list-style-type: none">Graduate School of Science and Technology, Master's Course.Intelligent Robot Dialogue Laboratory (RIKEN), supervised by Prof. Koichiro Yoshino.Received the NAIST Best Student Award. | Japan
Apr 2024 – Mar 2026 |
| National Institute of Technology, Tokuyama College , Computer Science and Electronic Engineering <ul style="list-style-type: none">Advanced Course.Miyazaki Laboratory, supervised by Prof. Ryoichi Miyazaki. | Japan
Apr 2022 – Mar 2024 |
| National Institute of Technology, Tokuyama College , Computer Science and Electronic Engineering <ul style="list-style-type: none">Regular Course.Miyazaki Laboratory, supervised by Prof. Ryoichi Miyazaki. | Japan
Apr 2017 – Mar 2022 |

Selected Publications

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| Wave-Trainer-Fit: Neural Vocoder with Trainable Prior and Fixed-Point Iteration towards High-Quality Speech Generation from SSL Features
Hien Ohnaka, Yuma Shirahata, Masaya Kawamura
(IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)) | Accepted 2026 |
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Grapheme-Coherent Phonemic and Prosodic Annotation of Speech by Implicit and Explicit Grapheme Conditioning Hien Ohnaka, Yuma Shirahata, Byeongseon Park, Ryuichi Yamamoto arxiv.org/abs/2506.04527 (Interspeech)	Aug 2025
Unsupervised Speech Enhancement with Spectral Kurtosis and Double Deep Priors Hien Ohnaka, Ryoichi Miyazaki doi.org/10.1250/ast.e24.66 (Acoustical Science and Technology)	Feb 2025
Visual Onoma-to-Wave: Environmental Sound Synthesis from Visual Onomatopoeias and Sound-Source Images Hien Ohnaka, Shinnosuke Takamichi, Keisuke Imoto, Yuki Okamoto, Kazuki Fujii, Hiroshi Saruwatari doi.org/10.1109/ICASSP49357.2023.10096517 (IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP))	June 2023

Awards

Best Student Award Awarded by Nara Institute of Science and Technology. Announcement	Mar 2026
Committee Special Award Awarded by the Association for Natural Language Processing for work on jointly predicting response timing and short responses for real-time spoken dialogue systems. Award details	Mar 2025
IEEE SPS Tokyo Joint Chapter Student Award Awarded for Visual Onoma-to-Wave. Award details	Feb 2023

Research Projects

Wave-Trainer-Fit A neural vocoder with trainable priors and fixed-point iteration for high-quality speech generation from self-supervised speech features. Accepted to ICASSP 2026.	2025 – 2026
Unsupervised Speech Enhancement with Spectral Kurtosis and Double Deep Priors An unsupervised speech enhancement method combining spectral kurtosis and deep priors. Published in Acoustical Science and Technology.	2024 – 2025
Visual Onoma-to-Wave Environmental sound synthesis from visual onomatopoeias and sound-source images. Accepted to ICASSP 2023.	2022 – 2023