

# Reo Yoneyama

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Second-year Ph.D. student supervised by Prof. Tomoki Toda

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Publications [Google Scholar](#)

GitHub <https://github.com/chomeyama>

Website <https://chomeyama.github.io/Profile/>

## RESEARCH AREAS

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- Signal processing, Machine learning
- Analysis and synthesis of voice and musical instrument sounds
- Text-to-speech, Singing voice synthesis
- Voice conversion, Singing voice conversion
- Music signal processing, Music information retrieval

## EDUCATION

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Apr. 2023 – Present	Ph.D. candidate, Department of Intelligent Systems, Graduate School of Informatics, Nagoya University, Japan
Apr. 2021 – Present	TMI WISE program: Graduate Program for Lifestyle Revolution Based on Transdisciplinary Mobility Innovation
Apr. 2021 – Mar. 2023	Master's degree, Department of Intelligent Systems, Graduate School of Informatics, Nagoya University, Japan
Apr. 2017 – Mar. 2021	Bachelor's degree, Department of Computer Science, School of Informatics, Nagoya University, Japan
Mar. 2017	Graduated from Tochigi Prefectural Kanuma High School, Japan

## WORK EXPERIENCE

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July. 2024 – Present	Joint research project with the ASP team at LY Corp., Japan
Feb. 2023 – Mar. 2024	Joint research project with the ASP team at LY Corp., Japan
May 2022 – Present	Research & development internship at TARVO Inc., Japan
May 2021 – Jan. 2023	Research internship at the Voice team, LINE Corp., Japan
Dec. 2019 – Apr. 2021	Research & development internship at Acompany Co., Ltd., Japan

## GRANTS

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Apr. 2024 – Mar. 2026	Japan Society for the Promotion of Science (JSPS) Research Fellowship for Young Scientists (DC2) (200,000 JPY / month + 1,500,000 JPY) [ <a href="#">website</a> ]
Apr. 2023 – Mar. 2026	Nagoya University Interdisciplinary Frontier Fellowship (180,000 JPY / month + 250,000 JPY / year) [ <a href="#">website</a> ]
Apr. 2023 – Mar. 2026	TMI WISE Program Fellowship (180,000 JPY / month) [ <a href="#">website</a> ]

## AWARDS

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Jan. 2024	SPS Japan Student Conference Paper Award 2023 [ <a href="#">website</a> ]
Oct. 2022	2022 Tokai Area Speech-Related Research Laboratory Master's Midterm Presentation Q&A Award
Sep. 2021	23rd Japan Acoustics Society Student Excellent Presentation Award [ <a href="#">website</a> ]
Nov. 2019	Domestic Qualifier of International Collegiate Programming Contest (ICPC) Asia Yokohama Regional 2019

## PUBLICATIONS

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### JOURNALS

2023	<b>Reo Yoneyama</b> , Yi-Chiao Wu, Tomoki Toda, "High-Fidelity and Pitch-Controllable Neural Vocoder Based on Unified Source-Filter Networks," IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 31, pp. 3717-3729, Sep 2023. [ <a href="#">website</a> ]
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## CONFERENCE PROCEEDINGS (PEER-REVIEWED)

- 2023            Ryuichi Yamamoto, **Reo Yoneyama**, Lester Phillip Violeta, Wen-Chin Huang, Tomoki Toda, "A Comparative Study of Voice Conversion Models with Large-Scale Speech and Singing Data: The T13 Systems for the Singing Voice Conversion Challenge 2023," Proc. ASRU, 6 pages, 2023. [[website](#)]
- Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Source-Filter HiFi-GAN: Fast and Pitch-Controllable High-Fidelity Neural Vocoder," Proc. IEEE ICASSP, 5 pages, 2023. [[website](#)]
- Reo Yoneyama**, Ryuichi Yamamoto, Kentaro Tachibana, "Nonparallel High-Quality Audio Super Resolution with Domain Adaptation and Resampling CycleGANs," Proc. IEEE ICASSP, 5 pages, 2023. [[website](#)]
- Ryuichi Yamamoto, **Reo Yoneyama**, Tomoki Toda, "NNSVS: A Neural Network-Based Singing Voice Synthesis Toolkit," Proc. IEEE ICASSP, 5 pages, 2023. [[website](#)]
- 2022            **Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Unified Source-Filter GAN with Harmonic-Plus-Noise Source Excitation Generation," Proc. Interspeech, pp. 848-852, 2022. [[website](#)]
- 2021            **Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Unified Source-Filter GAN: Unified Source-Filter Network Based on Factorization of Quasi-Periodic Parallel WaveGAN," Proc. Interspeech, pp. 2187-2191, 2021. [[website](#)]

## CONFERENCE PROCEEDINGS (NON PEER-REVIEWED)

- 2023            Ryuichi Yamamoto, **Reo Yoneyama**, Tomoki Toda, "NNSVS: A Neural Network-Based Singing Voice Synthesis Toolkit," The Acoustical Society of Japan (ASJ), 1-9-19, pp. 1057-1060, Autumn 2023 (in Japanese)
- Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Source-Filter-Architecture-Based HiFi-GAN," The Acoustical Society of Japan (ASJ), 2-3-5, pp. 721-722, Spring 2023 (in Japanese)
- 2022            **Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Improvement of Unified Source-Filter Network with Adversarial Learning," The Acoustical Society of Japan (ASJ), 1-3-10, pp. 907-908, Spring 2022 (in Japanese)
- 2021            **Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, "Unified Source-Filter Network with Adversarial

Learning," The Acoustical Society of Japan (ASJ), 2-3-2, pp. 905-906, Autumn 2021 (in Japanese)

**Reo Yoneyama**, Yi-Chiao Wu, Tomoki Toda, " A unified source-filter network for neural vocoder," IEICE Tech. Rep., vol. 120, no. 399, SP2020-34, pp. 57-62, 2021. (in Japanese)

## LANGUAGES

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Japanese	Native	
English	Intermediate	TOEIC Listening & Reading Test (Taken in May 2022) Score: 865 (Listening: 430, Reading: 435)

## PROGRAMMING SKILLS

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Experienced languages	Python, C, C++, JavaScript, HTML/CSS, R
Experienced DL frameworks	PyTorch, ONNX

## ACTIVITIES

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Dec. 2023 – Present	Technical Advising for <a href="#">Melisma</a> Software, Developed by Sakana Nakasako <a href="#">[paper]</a>
Competitive Programming	AtCoder Highest Rating: 1545. <a href="#">[website]</a> ICPC Asia Yokohama Regional, 2020. ICPC Asia Yokohama Regional, 2019.
Hackathon	JPHACKS @ Nagoya, Oct. 2019.