

# LESTER PHILLIP VIOLETA

[violeta.lesterphillip@g.sp.m.is.nagoya-u.ac.jp](mailto:violeta.lesterphillip@g.sp.m.is.nagoya-u.ac.jp)

[lesterphillip.github.io](https://lesterphillip.github.io)

## RESEARCH INTERESTS

---

I work on speech processing tasks such as speech recognition and voice conversion. I have been involved in several research work for atypical speech and singing voices.

## EDUCATION

---

**Ph.D. Intelligent Systems** Apr. 2023 - Present  
Nagoya University Nagoya, Japan

- Adviser: Prof. Tomoki Toda
- Research Title: Development of Speaking Aids for Atypical Speakers Through Voice Conversion
- 1 of 4 students selected for this scholarship program

**M.S. Intelligent Systems** Apr. 2021 - Mar. 2023  
Nagoya University Nagoya, Japan

- Adviser: Prof. Tomoki Toda
- Research Title: Pretraining and Adaptation Techniques for Pathological Speech Recognition
- 1 of 4 students selected for this scholarship program

**B.S. Electronics Engineering** Aug. 2015 - May 2020  
Ateneo de Manila University Quezon City, Philippines

- Advisers: Prof. Jose Claro Monje and Prof. Erees Queen Macabebe
- Research Title: Microgrid Energy Management System Development for Remote-Island Electricity Access
- Honor's program (Top 15% of students)

**Research Exchange Student** Aug. 2019 - Jan. 2020  
Institut Catholique d'Arts et Metiers, Site de Paris-Senart Lieusaint, France

- Adviser: Prof. Meriem Labourel
- Research Title: Microgrid Energy Management System Development for Remote-Island Electricity Access
- 1 of 3 students selected for this study abroad program

## CONFERENCE PUBLICATIONS

---

1. **L.P. Violeta**, W.-C. Huang, D. Ma, R. Yamamoto, K. Kobayashi, T. Toda, "Electrolaryngeal Speech Intelligibility Enhancement Through Robust Linguistic Encoders", Proc. ICASSP, Seoul, South Korea, Apr. 2024
2. **L.P. Violeta**, T. Toda, "An Analysis of Personalized Speech Recognition System Development for the Deaf and Hard-of-Hearing", Proc. APSIPA, Taipei, Taiwan, Oct. 2023.
3. **L.P. Violeta**, D. Ma, W.-C. Huang, T. Toda, "Intermediate Fine-tuning Using Imperfect Synthetic Speech for Improving Electrolaryngeal Speech Recognition", Proc. ICASSP, Rhodes Island, Greece, Jun. 2023.

4. **L.P. Violeta**, W.-C. Huang, T. Toda, "Investigating Self-supervised Pretraining Frameworks for Pathological Speech Recognition", Proc. INTERSPEECH, Incheon, Korea, Sep. 2022.
5. W.-C. Huang, **L.P. Violeta**, S. Liu, J. Shi, T. Toda, "The Singing Voice Conversion Challenge 2023", Proc. IEEE ASRU, Taipei, Taiwan, Dec. 2023
6. R. Yamamoto, R. Yoneyama, **L.P. Violeta**, W.-C. Huang, T. 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. IEEE ASRU, Taipei, Taiwan, Dec. 2023
7. B. Halpern, W.-C. Huang, **L.P. Violeta**, R. van Son, T. Toda, "Improving severity preservation of healthy-to-pathological voice conversion with global style tokens", Proc. IEEE ASRU, Taipei, Taiwan, Dec. 2023
8. D. Ma, **L.P. Violeta**, K. Kobayashi, T. Toda, "Two-Stage Training Method for Japanese Electrolaryngeal Speech Enhancement Based on Sequence-to-Sequence Voice Conversion", Proc. SLT, Doha, Qatar, Jan. 2023.
9. W.-C. Huang, B.M Halpern, **L.P. Violeta**, O. Scharenborg, T. Toda, "Towards Identity Preserving Normal to Dysarthric Voice Conversion", Proc. ICASSP, Singapore, May 2022.

## DOMESTIC PUBLICATIONS (NON-PEER REVIEWED)

---

1. **L.P. Violeta**, W.-C. Huang, D. Ma, R. Yamamoto, K. Kobayashi, T. Toda, "Electrolaryngeal speech enhancement through strong linguistic encoding methods", Vol. 123, No. 212, SP2023-33, pp. 33-38, Oct. 2023.
2. **L.P. Violeta**, W.-C. Huang, T. Toda, "A Comparison of Pretraining Frameworks for Improving Pathological Speech Recognition", ASJ 2-Q-25, pp. 1227-1228, Sep. 2022.
3. D. Ma, **L.P. Violeta**, K. Kobayashi, T. Toda, "Sequence-to-sequence Voice Conversion Training Using Synthetic Parallel Data for Electrolaryngeal Speech Enhancement", ASJ 2-8-8, pp. 1161-1162, Sep. 2022.

## AWARDS AND SCHOLARSHIPS

---

<b>Scholarship</b>	Monbukagakusho Japanese Government Scholarship (Ph.D. Degree)
<b>Scholarship</b>	Monbukagakusho Japanese Government Scholarship (Master's Degree)
<b>Travel Grant</b>	Interspeech 2022 Travel Grant
<b>Fellowship</b>	Nagoya University Interdisciplinary Frontier Fellowship

## ACADEMIC ACTIVITIES

---

<b>Organizing Committee</b>	Dec. 2022 - Dec. 2023
The Singing Voice Conversion Challenge 2023	ASRU 2023 Special Session
<ul style="list-style-type: none"> <li>• Developed open-sourced baseline system and starter kits</li> <li>• Constructed the official SVCC dataset from the NHSS dataset</li> <li>• Analyzed similarities from top performing systems through different evaluation metrics</li> </ul>	

## INTERNSHIPS AND WORK EXPERIENCE

---

**Research Assistant** Oct. 2023 - Present  
Sony Computer Science Laboratories *Tokyo, Japan*

- Adviser: Dr. Taketo Akama
- Developing systems for the music team

**Research Assistant** Apr. 2022 - Mar. 2023  
Nagoya University *Aichi, Japan*

- Adviser: Prof. Tomoki Toda
- Developed speech recognition systems for disordered speech datasets
- Provided analyses and insights of the disordered speech data

**Research Science Intern** Mar 2022 - Mar 2022  
NTT Media Intelligence Laboratories *Kanagawa, Japan*

- Adviser: Dr. Atsushi Ando
- Developed and analyzed speech diarization system using various encoders

**Research Science Intern** Jan 2022 - Feb 2022  
Hitachi Ltd. *Tokyo, Japan*

- Adviser: Dr. Takashi Sumiyoshi
- Developed speech recognition systems for low-resourced datasets

**Machine Learning Engineer** Jan 2021 - Jun 2021  
Wasimil *Remote*

- Provided data insights to marketing campaigns using natural language processing and machine learning
- Developed a k-means clustering algorithm to group customers for personalized marketing campaigns
- Developed models to review customer behavior towards marketing campaigns

**Software Engineer** May 2020 - Dec 2020  
Senti AI *Makati, Philippines*

- Developed chatbots for keeping track of employee health status using Google Dialogflow
- Created modules using natural language processing to improve message intent extraction
- Created a context-free grammar module to properly manage the chatbot's conversation state diagram flow

**Software Engineer Intern** Jun 2019 - Feb 2020  
Cascadeo Corporation *Quezon City, Philippines*

- Passed the Amazon Web Services Certified Cloud Practitioner Exam
- Developed Golang plug-ins for Telegraf to automate the collection of billing metrics of clients from their Amazon Web Services account

## LANGUAGES

---

**Native** Tagalog  
**Bilingual** English (TOEFL: 105/120)  
**Conversational** Japanese