Mikey Elmers

Kyoto, Japan Website: mikeyelmers.github.io Email: elmers@sap.ist.i.kyoto-u.ac.jp LinkedIn: mikey-elmers-1006b451 GitHub: github.com/mikeyelmers

Summary

Research scientist with years of experience in experimental design, data collection, statistical analyses, coding, and data visualization. Proficient in SQL, R, and Python. Native English speaker skilled in effectively communicating complex insights to stakeholders, both technical and non-technical.

EXPERIENCE

Kyoto UniversityResearcher

Kyoto, Japan
2023–Present

- Postdoctoral researcher, *Moonshot* project.
- Investigated spoken dialogue systems for human-robot interaction and virtual agents.
- Designed systems to improve speech expressivity.

Saarland University

Research Assistant

Saarbrücken, Germany

2020-2023

- Co-Researcher, Pause-Internal Phonetic Particles project (PhD Researcher).
- Conducted research on speech synthesis, specifically focusing on the behavior of phonetic particles within speech pauses.
- Investigated and modeled human pausing structure to generate natural and expressive speech synthesis using Python.
- Evaluated recall effects of speech pauses in speech synthesis with native and non-native listeners.
- Implemented experimental design, collected data, performed statistical analyses, and utilized coding skills for data visualization with R and markdown reports.
- Shared knowledge and findings by writing technical publications with LATEX and presenting at conferences.
- Developed materials and taught exercise sections for Speech Science course at the master's level, providing instruction and guidance to students.
- Advocated and implemented reproducible research practices to ensure the integrity and transparency of findings with Git for version control and GitHub for hosting repositories.

EDUCATION

Saarland University

Saarbrücken, Germany

Ph.D. in Phonetics

2020 – 2023

- Thesis: "Evaluating pause particles and their functions in natural and synthesized speech in laboratory and lecture settings"
- Area of Study: Language Science and Technology
- Advisor: Bernd Möbius

Waseda University

Tokyo, Japan

M.A. in International Culture and Communication Studies

2018-2020

 Thesis: "Comparing Phonetic Parameters within Comprehensibility: A Perceptual Judgment Study of Japanese-Accented English by different L1 backgrounds" - Area of Study: Speech Communication and Language Acquisition

Advisor: Mariko Kondo

University of Minnesota

B.A. in Linguistics

- Thesis: "A Comprehensive Analysis of Rendaku"

- Advisor: Brian Reese

Publications

Elmers, Mikey. (2023). Evaluating pause particles and their functions in natural and synthesized speech in laboratory and lecture settings (Doctoral dissertation). Saarland University.

Elmers, M., & Székely, É. (2023). The impact of pause-internal phonetic particles on recall in synthesized lectures. accepted: 12th ISCA Speech Synthesis Workshop (SSW).

Elmers, M., O'Mahony, J., & Székely, É. (2023). Synthesis after a couple PINTs: Investigating the role of pause-internal phonetic particles in speech synthesis and perception. accepted: Interspeech.

Elmers, M. (2023). Pause particles influencing recollection in lectures. accepted: Proc. ICPhS.

Elmers, M. (2022). Comparing detection methods for pause-internal particles. In O. Niebuhr, M. S. Lundmark, & H. Weston (Eds.), Studientexte zur sprachkommunikation: Elektronische sprachsignalverarbeitung 2022 (pp. 204–211). TUDpress, Dresden.

Elmers, M., Werner, R., Muhlack, B., Möbius, B., & Trouvain, J. (2021a). Take a Breath: Respiratory Sounds Improve Recollection in Synthetic Speech. Proc. Interspeech 2021, 3196–3200.

Muhlack, B., Elmers, M., Drenhaus, H., Trouvain, J., van Os, M., Werner, R., Ryzhova, M., & Möbius, B. (2021). Revisiting Recall Effects of Filler Particles in German and English. Proc. Interspeech 2021, 3979-3983.

Elmers, M., Werner, R., Muhlack, B., Möbius, B., & Trouvain, J. (2021b). Evaluating the effect of pauses on number recollection in synthesized speech. Elektronische Sprachsignalverarbeitung 2021, Tagungsband der 32. Konferenz, 289-295.

SKILLS Languages

• Technical Skills: R, SQL, Python, Git, Praat, LATEX, Microsoft, Linux

Research Skills: Machine Learning, Statistics, Research Methods

• Certification: Data Analyst in SQL, DataCamp

• English: Native

• Japanese: Beginner

Scholarships and Awards

• Azusa Ono Memorial Scholarship, Waseda University 2018

• Foreign Language and Area Studies (FLAS) Scholarship, University of Minnesota 2017

Invited Talks

• International Workshop on Phonetic and Phonological Processing and Learning, University of Tsukuba

- Title: Pause particles in speech synthesis

2023

Minneapolis, USA

TEACHING

• Teaching Assistant at Saarland University Speech Science (Excercise Section)	Winter 2023
Reviewer	
• SIGDIAL	2024
Meeting of the Special Interest Group on Discourse and Dialogue	
• YFRSW	2023-2024
Young Female Researchers in Speech Workshop	