# Eran Raveh

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#### **EDUCATION**

# Ph.D. in Language Science and Technology (magna cum laude)

2016 - 2020

Universität des Saarlandes

Saarbrücken, Germany

- · **Topic**: Vocal Accommodation in Human-Computer Interaction: Modeling and Integration into Spoken Dialogue Systems
- · Integrated M.Sc. in Speech Technology

## B.A. in Computational Linguistics (GPA: 93; ECTS: 1,4)

2012 - 2015

Eberhard Karls Universität Tübingen

Tübingen, Germany

- · Thesis: Automatic Generation of Customizable Recall Questions
- · Projects: Continuous lexical formality analysis, stimuli discrimination in speech, music & language
- · Visiting student at Trinity College Dublin

#### **EXPERIENCE**

# Senior Software Engineer

2020 - Present

Hyro AI

Tel Aviv, Israel

- · Defining processes for designing, developing, and delivering software components and new features for a conversation AI platform
- · Facing customers to identify opportunities and technical gaps
- · Specifying and implementing tools for customer journey analysis

# Speech Scientist Intern

2020

Fraunhofer IIS

Erlangen, Germany

- · Designing and implementing phoneme-based processing for the neural multilingual Tacotron-based text-to-speech component of a voice assistant
- · Leading UX surveys and experiments to identify gaps in useability and user satisfaction

Researcher

2016 - 2019

Multimodal Computing and Interaction

Saarbrücken, Germany

- · Developing spoken dialogue systems and human-computer interaction applications for public demonstrations and proof-of-concept research
- · Investigating new solutions and approaches for using state-of-the-art conversational AI technologies in every-day applications

# Language Engineer Intern

2014 - 2015

Voysis

Dublin, Ireland

- · Specifying and developing analysis and visualization processes for text-to-speech platforms
- · Creating NLP resources and algorithms for multilingual speech synthesis

## **Automation Engineer**

2010 - 2012

GE Healthcare

Haifa, Israel

- · Implementing automation processes for software testing and specifications management
- · Contact person for national and global teams

# **COMMUNITY**

YRRSDS (SIGdial satellite): chair (2018-2019), co-local organizer (2017)

Reviewer: EMNLP 2021, COLING 2020, SpeCom 2020, LREC 2020, Interspeech 2019

## SKILLS AND QUALIFICATIONS

**Programming Languages** Proficient: Python, Java, R

Familiar with: Groovy, JavaScript, SQL, VB, DOS-batch

Tools & Frameworks PyTorch, DialogFlow, OpenDial, NLTK, CoreNLP, Praat

Docker, Git, Gradle, LATEX

ISTQB Software Testing Certification from ITCB Foundation

#### **LANGUAGES**

HebrewNativeEnglishFluentGermanAdvanced (C1)

Arabic Intermediate (B1) Japanese Beginner (A2)

#### SELECTED PUBLICATIONS

- [1] I. Gessinger, B. Möbius, B. Andreeva, **Raveh**, **Eran**, and I. Steiner, "Phonetic accommodation of L2 german speakers to the virtual language learning tutor Mirabella," in *Interspeech*, **Best Student Paper Award**, Shanghai, China, Oct. 2020. DOI: 10.21437/Interspeech.2020-2701.
- [2] Raveh, Eran, I. Siegert, I. Steiner, I. Gessinger, and B. Möbius, "Three's a crowd? Effects of a second human on vocal accommodation with a voice assistant," in *Interspeech*, Graz, Austria, Sep. 2019, pp. 4005–4009. DOI: 10.21437/Interspeech.2019–1825.
- [3] Raveh, Eran, "Modeling phonetic accommodation for spoken dialogue systems," in SPCC, 2<sup>nd</sup> Best Paper Award, Heraklion, Greece, Jul. 2019.
- [4] Raveh, Eran, I. Steiner, I. Siegert, I. Gessinger, and B. Möbius, "Comparing phonetic changes in computer-directed and human-directed speech," in *Electronic Speech Signal Processing (ESSV)*, Best Student Paper Award, Dresden, Germany, Mar. 2019, pp. 42–49. DOI: 10.22028/D291-31943.
- [5] Raveh, Eran, I. Steiner, I. Gessinger, and B. Möbius, "Studying mutual phonetic influence with a web-based spoken dialogue system," in *Speech and Computer (Specom)*, ser. Lecture Notes in Artificial Intelligence, A. Karpov, O. Jokisch, and R. Potapova, Eds., vol. 11096, Springer, Sep. 19, 2018, pp. 552–562. DOI: 10.1007/978-3-319-99579-3\_57. arXiv: 1809.04945. [Online]. Available: https://arxiv.org/abs/1809.04945.
- [6] Raveh, Eran, I. Steiner, and B. Möbius, "A computational model for phonetically responsive spoken dialogue systems," in *Interspeech*, Stockholm, Sweden, Aug. 22, 2017, pp. 884–888. DOI: 10.21437/Interspeech.2017-1042.