Walter Philip Dych

Curriculum Vitae

Education Education

2023 BA in Linguistics, University of Delaware, Newark, Delaware

Work Experience

2023–Present **Research Assistant**, *Harvard University*, PhonLab under Dr. Kathryn Franich, Cambridge, MA

- O Perform video data annotation using ELAN.
- O Use PRAAT for audio data segmentation.
- Develop computational methods for the automation of gesture annotation and gesturespeech research.
- O Maintain and organize lab database

2022–2023 **Undergraduate Researcher**, *University of Delaware*, PhonLab under Dr. Kathryn Franich, Newark, DE

- O Organize and plan out research projects for gesture-speech relations.
- O Write papers for publication.
- Attend conferences.
- O Run lab meetings.
- O In charge of a group of research assistants.
- On call to aid other research assistants.
- O Published a peer-reviewed paper on experimental methods for gesture-speech relations and presented a research project on gesture-speech relations.
- O Develop methods for corpus collection.
- Develop computational methods for the automation of gesture annotation and gesturespeech research.
- Maintain and organize lab database

Publications

2023 Dych, W., Garvin, K., and Franich, K. 2023. Comparing manual vs. semi-automated methods for the coding of co-speech gestures. Proceedings of the 20th International Congress of Phonetic Sciences (ICPhS).

Presentations

2022 Dych, W. (2022). Gesture Magnitude Mapping in Meduumba. *University of Delaware Summer Scholars Symposium 2022*.

Skills

 $Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Java, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Java, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Java, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ Programming \quad Python (NumPy, \ Pandas, \ OpenCV, \ MediaPipe, \ Parselmouth, \ PscyhoPy), \ R, \ PscyhoPy), \ R, \ PscyhoPy (NumPy, \ Pandas, \ PscyhoPy), \ R, \ PscyhoPy (NumPy, \ Pandas, \ PscyhoPy), \ R, \ PscyhoPy (NumPy, \ Psc$

C++

Tools Git, Docker

Professional LATEX, Microsoft Office, Adobe Suite, Qualtrics

Software

Large GPT-3/4, PaLM2, BLOOM

Language

Models

Data Label Studio, ELAN Video Annotation, PRAAT

Annotation

Languages English(Fluent), Dutch(Fluent), German(C1), Spanish(C1), Italian(B2), Scottish

Gaelic(Research), Medumba(Fieldwork)

References

Dr. Kathryn Franich, Ph. D, Assistant Professor, Department of Linguistics, Harvard University, Cambridge, MA, ☑ kfranich@fas.harvard.edu

Dr. Karee Garvin, Ph. D, Postdoctoral Fellow, Department of Linguistics, Harvard University, Cambridge, MA, ⊠ kareegarvin@fas.harvard.edu

Dr. Alex Hong-Lun Yeung, Ph. D, Assistant Professor, Department of Linguistics and Cognitive Science, University of Delaware, Newark, DE, ☑ ahlyeung@udel.edu

Dr. Daniel Kinderman, Ph. D, Associate Professor, Department of Political Science and International Relations, University of Delaware, Newark, DE, ☑ kindermd@udel.edu