YI-CHIEN LIN

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Education

University of Washington, Seattle, Washington, U.S.A

Master of Science in Computational Linguistics   Sep. 2021 – Mar. 2023 (Expected)
- Thesis (In Progress): Inference for valance-changing morphology
- Advisor: Prof. Emily M. Bender

National Tsing Hua University, Hsinchu, Taiwan

Bachelor of Arts in Foreign Languages and Literature   Sep. 2015 – June 2020

Work Experiences

National Tsing Hua University Natural Language Processing Laboratory (Hsinchu, Taiwan)

Position: Research Assistant   July 2020 – July 2021
- Embedded dictionary definitions. Constructed a vector space model with WordNet for definition vectorization.
- Developed the algorithm for the detection of argument-hood.
- Performed evaluation of grammatical error correction project, and machine translation project.

National Tsing Hua University Natural Language Processing Laboratory (Hsinchu, Taiwan)

Position: Linguistic Intern   July 2019 – June 2020
- Generated guidelines for synchronous grammar pattern annotation across Chinese and English. Analyzed the syntactic structures of Chinese and English.
- Analyzed the relation between WordNet senses and Wikipedia pages. Assisted in developing the algorithm for aligning WordNet senses to their corresponding Wikipedia pages.
- Devised testing data guidelines for the Wikipedia-WordNet alignment task.

Glossika (Taipei, Taiwan)

Position: Linguistic Intern   Jan. 2019 – June 2019
- Refined the Role and Reference Grammar database. Analyzed and annotated possible thematic roles of English verbs for improvement of Glossika learning system.
- Amplified the lexicon databases of German, Dutch, and Swedish. Implemented their morphological structures with regular expression.

Professional Presentations

Tuan, K. W., **Lin, Y. C.**, Chen, L. K., Chang, J. S. & Lee, K. L. (2020, December). *ConSenses: Disambiguating content word groups based on knowledge base and definition embedding*. Poster presented at the 25th International Conference on Technologies and Applications of Artificial Intelligence (TAAI 2020), Taipei City, Taiwan.

Yang, C. Y., Chen, Y. Z., **Lin, Y. C.**, Tsai, W. T. & Chang, J. S. (2019, October). *Annotating Synchronous Grammar Patterns across English and Chinese*. Poster presented at the 31st Conference on Computational Linguistics and Speech Processing (ROCLING 2019), New Taipei City, Taiwan.

Hsu, C. C., Chang, F. Y., Chen, C. Y., Chen, P. Y., **Lin, Y. C.** & Liu, Y. T. (2019, March). *The asymmetry between ziji and ta-ziji in Mandarin: An empirical investigation*. Poster presented at the 2nd International Conference on Theoretical East Asian Psycholinguistics, Beijing, China.

Projects

Hixkaryana Grammar Implementation

Course Project for Knowledge Engineering For Deep Natural Language Processing, University of Washington

- Analyzed Hixkaryana syntax
- Implemented various linguistic phenomena with Head-Driven Phrase Structure Grammar (HPSG) for Hixkaryana (clausal modifier, non-verbal predicate, tense, aspect, adnominal possession, determiners, wh-questions, argument optionality, and agreement).

A Study of L2 Acquisition of Backward Anaphora Resolution

Course project for Sentence Comprehension, National Tsing Hua University

- Designed and refined experimental materials.
- Conducted the pilot experiment.
- Analyzed the experimental results.

** This is a collaborative work with Prof. Yi-Ching Josephine Su and Hsiang-Ching Chiu.

Teaching and Mentoring

University of Washington, Dept. of Linguistics (Seattle, Washington, U.S.A)

Position: Mentor   Sep. 2022 – Present

- Program: Linguistics Undergraduate Research Apprenticeship Program (LURAP)
- Project: Treebanking Linguistic Corpora

National Tsing Hua University, Dept. of Foreign Languages and Literature (Hsinchu, Taiwan)

Position: Teaching Assistant   Jan. 2020 – June 2020

- Course: FL422000 Sentence Processing Experiments (Instructor: Prof. Chun-Chieh Hsu, Ph.D.)

Award

- Academic Achievement Award, NTHU (2018): top 5% in class

Computer Skills and Languages

- *Computer Programming Languages*: Python, C, C++, JavaScript, R, HTML
- *Languages*: Mandarin (Native), English (Advanced; TOEFL: 110/120), German (Pre-intermediate), Japanese (Beginner)

Selected Extracurricular Activities

- *Leader of Design and Promotion Section,* Senior Play of FLL, NTHU   May 2018 – Dec. 2018
- *Chief Director of Planning*, Science Service Club, NTHU   2016 – 2017