

## Education

- 2020 **Doctoral Fellowship**, *Department of Linguistics*, Ohio State University.
  - GPA 4.00/4.00, TOEFL 112/120, GRE 335/340.
- 2015–2017 **M.Sc.**, *Department of Computer Science & Information Engineering*, National Taiwan University.
  - GPA 3.90/4.30, ranking 70/152.
- 2011–2015 **B.Sc.**, *Department of Computer Science & Information Engineering*, National Taiwan University.
  - GPA 4.08/4.30, ranking 4/111.
  - The Presidential Awards: Autumn 2013, Autumn 2012, Spring 2012.

## Experience

- 2018–2020 **Research Assistant**, *Institute of Information Science, Academia Sinica* 中央研究院.
  - Research publication on named entity recognition (**AAAI**, **EMNLP**), relation extraction (**ACL**), knowledge graph (**LREC**).
  - Developed CkipTagger (<https://github.com/ckiplab/ckiptagger>).
    - A state-of-the-art, light weight, customizable neural package for traditional Chinese.
    - Integrating word segmentation, part-of-speech tagging, and named entity recognition.
  - Competed in the 2018-2019 **Formosa Grand Challenge** 科技大擂台.
    - Spoken question answering for traditional Chinese.
    - 2nd-place in the short-answer track, 3rd-place in the multiple-choice track, out of 143 teams.
    - Developed the strongest models for the team in both tracks; model ensemble; speech recognition denoising and segmentation.
  - Competed in the **IJCNLP-2017 DSAP** shared task: sentiment analysis for Chinese phrases.
    - Developed all the models; 1st-place in the arousal track, 3rd-place in the combined track, out of 13 teams.
- 2014–2016 **QA Engineer**, *Trend Micro* 趨勢科技.
  - Developed integrated test automation for an enterprise Intrusion Prevention System (IPS).
  - For the user-awareness module: Active Directory and LDAP test environments.
  - For the TLS stack: man-in-the-middle connections, handshake protocols, data encryption protocols.
  - For the application traffic scan engine: extract packets in anomalous applications.
- Summer 2013 **Intern Engineer**, *InfoKeyVault Technology* 銓安智慧科技.
  - Porting a secure, encrypted custom Windows file system to a custom Linux Virtual File System.
- Part-time **Teaching Experience**.
  - Spring 2016, Teaching Assistant (Introduction to AI), *Department of CSIE, NTU* 台灣大學.
    - Designing program assignments and test automation; tutoring and reviewing term projects and term exams.
  - 2011-2013, Math Tutor, *HER-JER Math After-class School* 赫哲數學.
    - Tutoring high school students; writing detailed solutions for term exams, college entrance exams.

## Publications

- 2020 **Why Attention? Analyze BiLSTM Deficiency and Its Remedies in the Case of NER**.
  - Peng-Hsuan Li, Tsu-Jui Fu, Wei-Yun Ma.
  - In Proceedings of the AAAI Conference on Artificial Intelligence (**AAAI**).
- 2020 **CA-EHN: Commonsense Analogy from E-HowNet**.
  - Peng-Hsuan Li, Tsan-Yu Yang, Wei-Yun Ma.
  - In Proceedings of The 12th Language Resources and Evaluation Conference (**LREC**).
- 2019 **GraphRel: Modeling Text as Relational Graphs for Joint Entity and Relation Extraction**.
  - Tsu-Jui Fu, Peng-Hsuan Li, Wei-Yun Ma.
  - In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (**ACL**).
- 2019 **HWE: Word Embedding with Heterogeneous Features**.
  - Jhih-Sheng Fan, Mu Yang, Peng-Hsuan Li, Wei-Yun Ma.
  - In Proceedings of 2019 IEEE 13th International Conference on Semantic Computing (**ICSC**).
- 2017 **Leveraging Linguistic Structures for Named Entity Recognition with Bidirectional Recursive Neural Networks**.
  - Peng-Hsuan Li, Ruo-Ping Dong, Yu-Siang Wang, Ju-Chieh Chou, Wei-Yun Ma.
  - In Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (**EMNLP**).
- 2017 **CKIP at IJCNLP-2017 Task 2: Neural Valence-Arousal Prediction for Phrases**.
  - Peng-Hsuan Li, Wei-Yun Ma, Hsin-Yang Wang.
  - In Proceedings of the **IJCNLP 2017, Shared Tasks**.