YI-HUI (LILY) LEE

214-809-6335 | yi-hui.lee@utdallas.edu | `https://www.linkedin.com/in/yi-hui-lee/` | `https://finalily.github.io`

SUMMARY

Fourth year Ph.D. Candidate in Computer Science passionate in Artificial Intelligence looking for a position as Research Intern. Prefer but not limit to working on Machine Learning and Artificial Intelligence.

EDUCATION

The University of Texas at Dallas   **Richardson, TX**
Doctor of Philosophy in Computer Science   *Aug. 2018 to May. 2023(expected)*
National Taiwan Normal University   **Taipei, Taiwan**
Master of Science and Bachelor of Science in Computer Science and Information Engineering   *Sep. 2011 to Aug. 2017*

EXPERIENCE

The University of Texas at Dallas (PyTorch, AWS-Mturk, spaCy, AllenNLP, Gensim)   **Richardson, TX**
*Research Assistant, Advisor: **Prof. Shuang Hao***   *Aug. 2018 to Present*

- Research on fake news, fake images and fake videos.
- Design deep learning-based method to detect fake information in social media.
- Build token embedding by **Gensim** and group with Hierarchical/ K-means clustering. Define IoT device domain-name patterns.

Institute of Information Science, Academia Sinica   **Taipei, Taiwan**
*Research Assistant, Advisor: **Prof. Wei-Yun Ma***   *Jul. 2016 to Jun. 2018*

- Researched on natural language processing and deep learning related topics.
- Designed a product embedding model to assign an unique product to entities mentioned in the blog. (**Published** in **LREC 2020**[1].)
- Proposed bootstrapping method to extract instances from unstructured movie articles. (**Published** in **WWW Demo 2017**[4].)

IBM   **Taipei, Taiwan**
Software Engineering Intern   *Jul. 2015 to Dec. 2015*

- Worked on troubleshooting solutions for auto insurance batch system such as insurance renewal and reimbursement accounting.
- Debugged and detected in user acceptance testing stage, increased acceptance rate to 95%.
- Led internship group of 12 people on planning panel talks and designing a business proposal for emotional cloud service.

National Taiwan Normal University   **Taipei, Taiwan**
*Research Assistant, Advisor: **Prof. Jia-Ling Koh***   *Sep. 2015 to Aug. 2017*

- Research on knowledge discovery and data/ text mining
- Designed a web search-based approach to extract conditional relation tuple for diseases and symptoms.
- **Published** in IEEE/WIC/ACM International Conference on Web Intelligence (**WI 2018**), Santiago[3].

SELECTED PROJECT

Computer Vision with Convolutional Neural Networks   **Aug. 2020 to May. 2021**

- Combine deep learning (**MTCNN, cascade**) and rule-based algorithm to detect eye-blinking leading 81.36% accuracy. (**TensorFlow**)
- Design Attention-Based Bilingual Image2caption Emoji Model (**ABBIE**) for image captioning. (**PyTorch, Python, cv2, Hugging Face**)
- **ABBIE** used three subsystem components; Transformer, bilingual language model and image caption model.

PUBLICATIONS

[1] Mu Yang, Chi-Yen Chen, **Yi-Hui Lee**, Qian-Hui Zeng, Wei-Yun Ma, Chen-Yang Shih, Wei-Jhih Chen, "Headword-Oriented Entity Linking: A New Entity Linking Task with Dataset and Baseline," *Proc. LREC*, May 2020.

[2] Kung-Hsiang Huang, Yi-Fu Fu, Yi-Ting Lee, Tzong-Hann Lee, Yao-Chun Chan, **Yi-Hui Lee**, Shou-De Lin, "A-HA: A Hybrid Approach for Hotel Recommendation," *Proc. the 13th ACM Recommender Systems Challenge Workshop, RecSys Challenge*, September 2019.

[3] **Yi-Hui Lee**, Jia-Ling Koh, "Conditional Relationship Extraction for Diseases and Symptoms by a Web Search-Based Approach," *Proc. IEEE/WIC/ACM International Conference on Web Intelligence*, December 2018.

[4] Peng-Yu Chen, **Yi-Hui Lee**, Yueh-Han Wu, Wei-Yun Ma, "IExM: Information Extraction System for Movies," *Proc. ACM WWW Demo Track*, April 2017. (**Best Demo - Special Mention Award**)

AWARDS

- **4th Place (4/1564)**, ACM RecSys X Trivago Challenge 2019 (**Published** in **RecSys 2019** [2].)
- **Travel Grant**, Google Grace Hopper Celebration, 2018
- **Women Techmakers Scholarship**, Google (Asia Pacific Area), 2017
- **1st Place**, PIXNET (Taiwan) CHATBOT HACKATHON, 2017
- **Top 25**, ATCC X IBM (Taiwan) 11th National College Business Case Competition, 2013

SKILLS

- **Programming Language**: Python, PyTorch, Tensorflow, C/C++, Java, Matlab, PHP, HTML, MySQL, JavaScript, CSS
- **Platform**: Keras, AWS EC2, GCP, Linux, Twitter API, Spark, Hadoop, OpenCL, OpenMP, LaTeX, Scrapy