Pei-Chi Lo 羅珮綺

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SUMMARY

Pei-Chi is an Assistant Professor at National Sun Yat-sen University. Driven by a passion for academia and research, she obtained her PhD degree from Singapore Management University (SMU) and has actively involved in research projects related to smart social and urban analytics. Pei-Chi's research interests lie primarily in knowledge graph-based information retrieval, user profiling, and computational linguistics. She has demonstrated her expertise by publishing papers in internationally recognized conferences and journals, including SIGIR, TOIS, TMIS, and ICWSM.

EDUCATION

Singapore Management University

Singapore

PhD in Computer Science

Jan 2018-Jun 2023

Dissertation: Connecting The Dots for Contextual Information Retrieval

Supervisor: Prof. Ee-Peng Lim **Dissertation Committee:**

Prof. Jing Jiang (Singapore Management University) Asst. Prof. Yuan Fang (Singapore Management University) Assoc. Prof. Aixin Sun (Nanyang Technological University)

National Sun Yat-sen University

Kaohsiung, Taiwan

M.B.A., Management in Information Systems

Sep 2015-Jul 2016

Thesis: Quality Analysis and Prediction of User Reviews Using Discourse Structure

Supervisor: Prof. San-Yih Hwang

National Sun Yat-sen University

Kaohsiung, Taiwan

B.A., Management in Information Systems

Sep 2011-Jun 2015

PROFESSIONAL EXPERIENCE

National Sun Yat-sen University Assistant Professor

Kaohsiung City, Taiwan Feb 2024 - Present

National Cheng-Kung University - Academia Sinica PostDoc Researcher

Tainan City, Taiwan Jul 2023 - Jan 2024

- Lead a research project focusing on knowledge graph-based fake news detection and mitigation.
- Develop models for retrieving facts from knowledge graphs to counter potential fake news.
- Design systems to recommend credible news amidst prevalent fake news.
- Construct real-time fake news detection datasets.

Living Analytic Research Centre, SMU Research Engineer

Singapore, Singapore

Jul-Dec 2017

- Collaborated with external research agencies.
- Developed models for learning Singlish (an English creole language) words and their meaning

- from user-generated content, including tweets and online forum posts.
- Developed linguistic inquiry and word count toolkit (S-LIWC) to measure psychometric profiles from content generated by Singlish speaking users.
- Conducted user surveys to collect user content and profile label data for developing and evaluating prediction models for personality traits.
- Published three conference papers based on the experiments and findings in this project.

Department of Information Systems, NSYSU Research Assistant

Kaohsiung, Taiwan *Jul 2016-Jun 2017*

- Collaborated with industry and created a social listening system.
- Designed and maintained the system backend, including database system and server deployment.
- Developed real-time topic modeling and sentiment detection tools on online forums and news.
- Trained and supervised master's and undergraduate students to build a natural language processing web application for academic researchers.

PUBLICATIONS

- Lo, Pei-Chi, Tsai, Yi-Hang, Lim, Ee-Peng, & Hwang, San-Yih (2023). On Exploring the Reasoning Capability of Large Language Models with Knowledge Graphs. In SIGIR Workshop on Generative Information Retrieval (Gen-IR@SIGIR23).
- Lo, Pei-Chi, & Lim, Ee-Peng (2023). Non-Monotonic Generation of Knowledge Paths for Context Understanding. ACM Transactions on Management Information Systems (Accepted).
- Lo, Pei-Chi, & Lim, Ee-Peng (2023). A Transformer Framework for Generating Context-Aware Knowledge Graph Paths. Applied Intelligence.
- Lo, Pei-Chi, Lee, Yang-Yin, Chen, Hsien-Hao, Kwee, Angus Trisnajaya, & Lim, Ee-Peng (2023).
 Contrastive Learning Approach to Word-in-Context Task for Low-Resource Languages. In AAAI Workshop on Knowledge Augmented Methods for NLP (KnowledgeNLP-AAAI'23).
- Hsieh, Lee-Hsun, Chua, Nam-Chew, Kwee, Angus Trisnajaya, **Lo, Pei-Chi**, Lee, Yang-Yin & Lim, Ee-Peng (2022). Singlish Checker: A Tool for Understanding and Analysing an English Creole Language. In The 24th International Conference on Asia-Pacific Digital Libraries.
- Lo, Pei-Chi, & Lim, Ee-Peng (2022). Your Cursor Reveals: On Analyzing Workers' Browsing Behavior and Annotation Quality In Crowdsourcing Tasks. IEEE Access.
- Lo, Pei-Chi, & Lim, Ee-Peng (2022). Contextual Path Retrieval: A Contextual Entity Relation Embedding-based Approach. ACM Transactions on Information Systems. (*Presented in SIGIR 2023*).
- Silva, Amila, **Lo, Pei-Chi**, & Lim, Ee-Peng (2021). On Predicting Personal Values of Social Media Users using Community-Specific Language Features and Personal Value Correlation. Proceedings of the International AAAI Conference on Web and Social Media, 15(1), 680-690.
- Lo, Pei-Chi, & Lim, Ee-Peng (2020). Co-Embedding Attributed Networks with External Knowledge. 2020 IEEE International Conference on Big Data (Short Paper).
- Lo, Pei-Chi, & Lim, Ee-Peng (2020). Interactive Entity Linking Using Entity-Word Representations. In Proceedings of the 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval (pp. 1801-1804).
- Silva, Amila, **Lo, Pei-Chi**, & Lim, Ee-Peng (2020). JPLink: on linking jobs to vocational interest types. In Pacific-Asia Conference on Knowledge Discovery and Data Mining (pp. 220-232).
- Lo, Pei-Chi, & Lim, Ee-Peng (2018). On learning psycholinguistics tools for english-based creole

languages using social media data. In 2018 IEEE International Conference on Big Data (pp. 751-760).

• Lai, Chia-Yu, **Lo, Pei-Chi**, & Hwang, San-Yih, Incorporating Comment Text into Success Prediction of Crowdfunding Campaigns (2017). In 2017 Pacific Asia Conference on Information Systems. 156.

TEACHING EXPERIENCE

Lecturer Taiwan

MIS998 - Digital Marketing & Analytics, National Sun Yat-sen University

Feb-Jun 2024

• Course Information (Traditional Chinese)

Senior Teaching Assistant

Singapore

Research Topics in Information Systems, Singapore Management University

Apr-Jul 2020

- Organized and led weekly discussions for first-year PhD students on research topics.
- Evaluated and critiqued students on their presentation skills.
- Taught a session on presentation slide planning and design.

Graduate Instructor Foundations in Teaching Program (GIFT)

Singapore

Centre of Teaching Excellence, Singapore Management University

May 2020

- Completed pre-training activities including teaching observation and reading assessment.
- Undertook training sessions covering teaching foundations, instructional strategies, course planning, and student assessment design.
- Passed the post-training assessment which included a 4-minute video presentation on lesson design of my own discipline [video link].

Senior Teaching Assistant

Singapore

IS112 - Data Management, Singapore Management University

Apr-Jul 2020

• Assisted lecturers in test and project assessment.

Teaching Assistant

Taiwan

MIS205 - Database Management, National Sun Yat-sen University

Jan-Jun 2016

- Assisted lecturers in test and project assessment.
- Tutored students and held office hours.

AWARDS & SCHOLARSHIPS

• Finalist, Legal-Tech Hackathon, LawsNote	Sep 2021
PhD Full Scholarships, Singapore Management University	2018-21
• Five-Year BA-MA Program Scholarship, National Sun Yat-sen University	2015-16

GRANTS

- Singlish Learning by Crowdsourcing, DSO National Laboratories, Singapore, Co-Investigator, 2020, SGD\$612,300
- Research on Cross-Lingual Opinion Mining (多語言意見探勘的研究), Ministry of Science and Technology (MOST), Taiwan, **Co-author of Proposal**, 2017, TWD\$2,665,000

PROFESSIONAL SERVICES

- Reviewer. Journal of e-Business, 2024
- Reviewer. Knowledge and Information Systems, 2024
- Reviewer. Cluster Computing, 2024
- Reviewer. Frontiers of Computer Science, 2023
- Reviewer. Thirty-Sixth AAAI Conference on Artificial Intelligence, 2021
- Reviewer. Electronic Commerce Research and Applications, 2021
- Reviewer. Thirty-Fifth AAAI Conference on Artificial Intelligence, 2020

LANGUAGES

- English Full Professional Proficiency
- Mandarin Native
- Japanese Limited Working Proficiency. Passed JLPT N2.

REFERENCES

Ee-Peng Lim, Professor of Computer Science

School of Computing and Information Systems, Singapore Management University (+65)68280781, eplim@smu.edu.sg

San-Yih Hwang, Professor

Department of Information Management, National Sun Yat-sen University (+886)7-5252000 ext.4723, syhwang@mis.nsysu.edu.tw

Jing Jiang, Professor of Computer Science

School of Computing and Information Systems, Singapore Management University (+65)68280785, jingjiang@smu.edu.sg

Yuan Fang, Assistant Professor of Computer Science

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