Chun Hei LO

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ttps://aaronlolo326.github.io/

EDUCATION

Ph.D. in Systems Engineering and Engineering Management

Aug 2019-Present

The Chinese University of Hong Kong (CUHK)

(Expected: Jan 2024)

Thesis: Learning Semantics from Meaning Representations: From Distributional and Graph-Grammatical Perspec-

B.Sc. (Hons) with First Class Honors in Computer Science

Sept 2015-July 2019

The Chinese University of Hong Kong

Work

Junior Research Assistant

July 2019

EXPERIENCE

Department of Systems Engineering and Engineering Management, CUHK

• Collaboratively researched cross-framework meaning representations parsing and published a paper

Software Engineer Intern

June 2018-Aug 2018

Set Sail Software

Automated analysis of chatbot's performance on actual message data

Selected Publications AND PREPRINTS

- [4] Chun Hei Lo and Guy Emerson. 2023. Distributional Inclusion Hypothesis and Quantifications: Probing Hypernymy in Functional Distributional Semantics. arXiv:2309.08325
- [3] Chun Hei Lo, Hong Cheng, Wai Lam, and Guy Emerson. 2023. Functional Distributional Semantics at Scale. In Proceedings of the 12th Joint Conference on Lexical and Computational Semantics (*SEM 2023), pages 423-436, Toronto, Canada
- [2] Chun Hei Lo, Wai Lam, and Hong Cheng. 2022. Semantic Composition with PSHRG for Derivation Tree Reconstruction from Graph-Based Meaning Representations. In Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 5425–5439, Dublin, Ireland
- [1] Mudit Chaudhary, Borislav Dzodzo, Sida Huang, Chun Hei Lo, Mingzhi Lyu, Lun Yiu Nie, Jinbo Xing, Tianhua Zhang, Xiaoying Zhang, Jingyan Zhou, Hong Cheng, Wai Lam, and Helen Meng. 2021. Unstructured Knowledge Access in Task-oriented Dialog Modeling using Language Inference, Knowledge Retrieval and Knowledge-Integrative Response Generation. arXiv:2101.06066

Projects

Task-Oriented Dialogue System with Unstructured Knowledge Access

2021

• I was a member of the CUHK team in participating the Ninth Dialog System Technology Challenge (DSTC9). I led a subteam of undergraduates and research assistants and developed an approach to the subtask of knowledge selection for answering users' queries. We ranked 12 out of the 24 participating teams in the end.

CV-JD Recommendation System

• I wrote a crawler to scrap over 40,000 publicly available CVs and 20,000 job descriptions (JDs), from which word-level and document-level representations were learnt using unsupervised methods. A CV-JD matching algorithm based on the learnt representations was developed and comprehensively evaluated.

Selected AWARDS

Dean's List, Faculty of Engineering, CUHK

2015-16, 2016-17, 2017-18, 2018-19

Master's List, Wu Yee Sun College, CUHK

2016-17, 2017-18, 2018-19

ELITE Stream Student Scholarship, Faculty of Engineering, CUHK Computer Science Scholarship, Dept. of Computer Science and Engineering, CUHK 2016-17, 2018-19

2015 - 16

Medals, Hong Kong Olympiad in Informatics

• Silver (Senior Group) in 2015; Gold (Junior Group) in 2013; Silver (Junior Group) in 2012

INVITED

Functional Distributional Semantics (FDS) at Scale and Probing Hypernymy in FDS, 19th DELPH-IN Summit, PRESENTATIONS Language and Information Society of University of A Coruña 27 June 2023

> $Semantic\ Composition\ with\ PSHRG\ for\ Derivation\ Tree\ Reconstruction\ from\ Graph-Based\ Meaning\ Representations,$ Seminar at Foundations of Language Processing of Umeå University, Virtual 16 Sept 2022

Teaching

Teaching Assistant

EXPERIENCE

Faculty of Engineering, CUHK

• CSCI2100: Data Structures

2019-20, 2020-21, 2021-22, 2022-23

• SEEM3550: Fundamentals in Information Systems

 $2020-21,\ 2021-22,\ 2022-23$

Core Skills

Natural Languages Cantonese (native), English (proficient), Mandarin (proficient)

AND

Programming Languages Python (experienced), C (experienced)

Competencies

Frameworks PyTorch (experienced), scikit-learn (experienced)