DO, Van Quyet

Homepage: http://dovanquyet.github.io/

Research Interests

The two main problems with current LLMs that I am concerned are efficient learning ability and generalized reasoning ability. Therefore, for future research, I will focus on the following areas:

- **Neuro-symbolic reasoning methods:** I intend to investigate the utilization of external resources, specifically existing knowledge graphs, in order to facilitate the identification and rectification of erroneous beliefs within language models.
- Efficient (transfer) learning: I aspire to enable LMs to learn from very little supervision, which is a hallmark of human intelligence. I am particularly interested in how to discover and effectively finetune the most critical subnetworks of LMs w.r.t to each task.

Education

08/2022 - Present

M.Phil. Computer Science and Engineering

Hong Kong University of Science and Technology (HKUST)

Supervisor: Prof. Yangqiu Song

Specialization: Natural Language Processing, Commonsense Reasoning

08/2018 - 06/2022

B.Sc. Data Science and Pure Math (Advanced Track)

Hong Kong University of Science and Technology (HKUST)

CGA: 4.0/4.3 as of Graduation (Top 2/39)

First Class Honors with Academic Achievement Medal

Research Publications

Articles

T. Fang, Q.V. Do, S. Choi, W. Wang, and Y. Song, "CKBP v2: An expert-annotated evaluation set for commonsense knowledge base population," *ArXiv*, vol. abs/2304.10392, 2023. URL: https://api.semanticscholar.org/CorpusID: 258236552.

Conference Proceedings

- Y. Bang, S. Cahyawijaya, N. Lee, et al., "A multitask, multilingual, multimodal evaluation of chatgpt on reasoning, hallucination, and interactivity," in Proceedings of the 13th International Joint Conference on Natural Language Processing and the 3rd Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics, Nusa Dua, Bali: Association for Computational Linguistics, Nov. 2023, pp. 675–718. OURL: https://aclanthology.org/2023.ijcnlp-long.45.
- Z. Wang, Q. V. Do, H. Zhang, et al., "COLA: Contextualized commonsense causal reasoning from the causal inference perspective," in *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, Toronto, Canada: Association for Computational Linguistics, Jul. 2023, pp. 5253–5271. ODOI: 10.18653/v1/2023.acl-long.288.
- T. Fang, Q. V. Do, H. Zhang, Y. Song, G. Y. Wong, and S. See, "PseudoReasoner: Leveraging pseudo labels for commonsense knowledge base population," in *Findings of the Association for Computational Linguistics: EMNLP 2022*, Abu Dhabi, United Arab Emirates: Association for Computational Linguistics, Dec. 2022, pp. 3379–3394. ODI: 10.18653/v1/2022.findings-emnlp.246.

Teaching Experience

09/2023 - 12/2023 Teaching Assistant, COMP2211: Exploring Artificial Intelligence, HKUST

02/2023 - 05/2023 Teaching Assistant, COMP4332: Big Data Mining and Management, HKUST

08/2017 - 07/2018 Teaching Assistant, CMATH Mathematics Center, Hanoi

Working Experience

06/2022 - 08/2022 AI Engineer Intern, Eureka FinTech Limited, Hong Kong

09/2021 - 06/2022 Research Assistant, Knowledge Computation Group, HKUST

03/2021 - 09/2021 AI Engineer Intern, R&D group, Vietnam Technology International, Hanoi

09/2019 - 09/2021 Research Assistant, HKUST Cheminformatics Lab (led by Prof. Haibin SU), **HKUST**

Awards and Achievements

Area Chair Award, Language Modeling and Analysis Track, IJCNLP-AACL 2023 2023

Postgraduate Studentship, HKUST 2022-2024

Academic Achievement Medalist of UG Class of 2022, HKUST 2022

Chern Class Achievement Scholarship with outstanding performance, HKUST 2019-2022

Epsilon Fund Award, HKUST 2021, 2022

Dean's List Student (All semesters except Spring 2021), HKUST 2018-2022

University Scholarship, HKUST

Bronze Medalist, 58th International Mathematical Olympiad 2017

Skills

Vietnamese (Native), English (Full Proficiency), Chinese (Elementary Proficiency). Languages

Coding Python, PyTorch, familiar to TPU-training and Cloud Computing.

Misc. Seminar organization, Mental health First aid.

References

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