Tien-Hsuan Wu

吳典軒 (Kevin Wu)

Email: thwu@connect.hku.hk Rm G01, G/F Hui Oi Chow Science Building, The University of Hong Kong, Hong Kong

Education

PhD, The University of Hong Kong (2021)

Department of Computer Science

Research Interests: Data Mining, Knowledge-Based Systems

BEng in Computer Science, The University of Hong Kong (2017)

First Class Honours Minor in Finance

Working Experience

Lecturer, Tam Wing Fan Innovation Wing, Faculty of Engineering, HKU (2024/11-present)

Post-doctoral Fellow,

Faculty of Law, HKU (2023/07-2024/10) Department of Computer Science, HKU (2021/11-2023/07)

Research Assistant, Center for E-Commerce Infrastructure Development, HKU (2016/10-2017/08) Development and testing of *Hermes Business Messaging Gateway*.

Talks

Michael MK Cheung, <u>Tien-Hsuan Wu</u>, Mingruo Yuan, Ben Kao, Anne SY Cheung and Felix WH Chan. "Navigating the Legal Matrix with the Legal Question Bank and CLIC" at Law via the Internet, University of Vienna, Austria (2023/11/7)

Leyang Huang, Daniel Hicks, Xiang Chen, Ben Kao and <u>Tien-Hsuan Wu</u> "On the Use of Large Language Model and Legal Knowledge Base in Community Legal Education" at Law via the Internet, University of Vienna, Austria (2023/11/7)

Tien-Hsuan Wu "大模型於大眾法律教育的應用 Application of Large Language Models in Public Legal Education" at the 6th International Forum on Computational Law, Tsinghua University, China. (2023/10/21)

Publications

Titus T.H. Ng, <u>Tien-Hsuan Wu</u>, Benjamin Minhao Chen, Yongxi Chen, Ben Kao. "A Multi-Stage Prompting and RAG Approach to Generating Legal Analysis in Common Law Systems." International Conference on Legal Knowledge and Information Systems (JURIX2024). Legal Knowledge and Information Systems, pages 387-388. IOS Press, 2024.

<u>Tien-Hsuan Wu</u>, Ben Kao and Michael M. K. Cheung. "Judgment Retrieval Made Easier Through Query Analysis." International Conference on Legal Knowledge and Information Systems (JURIX2023). Legal Knowledge and Information Systems, pages 299-304. IOS Press, 2023.

Mingruo Yuan, Ben Kao, <u>Tien-Hsuan Wu</u>, Michael M. K. Cheung, Henry W. H. Chan, Anne S. Y. Cheung, Felix W. H. Chan and Yongxi Chen. "Bringing legal knowledge to the public by constructing a legal question bank using large-scale pre-trained language model." Artificial Intelligence and Law (2023): 1-37.

Guowen Yuan, Ben Kao and <u>Tien-Hsuan Wu</u>. "CEMA – Cost-Efficient Machine-Assisted Document Annotations." In The Thirty-Seventh AAAI Conference on Artificial Intelligence (AAAI-23), pages 11044-11050, AAAI, 2023.

<u>Tien-Hsuan Wu</u>, Ben Kao, Henry Chan and Michael MK Cheung. "Judgment Tagging and Recommendation Using Pre-trained Language Models and Legal Taxonomy." International Conference on Legal Knowledge and Information Systems (JURIX2022). Legal Knowledge and Information Systems, pages 255-260. IOS Press, 2022.

<u>Tien-Hsuan Wu</u>, Ben Kao, Felix Chan, Anne SY Cheung, Michael MK Cheung, Guowen Yuan and Yongxi Chen. "Semantic Search and Summarization of Judgments Using Topic Modeling." International Conference on Legal Knowledge and Information Systems (JURIX2021). Legal Knowledge and Information Systems, pages 100-106. IOS Press, 2021.

<u>Tien-Hsuan Wu</u>, Ben Kao, Anne SY Cheung, Michael MK Cheung, Chen Wang, Yongxi Chen, Guowen Yuan and Reynold Cheng. "Integrating Domain Knowledge in AI-assisted Criminal Sentencing of Drug Trafficking Cases." International Conference on Legal Knowledge and Information Systems (JURIX2020). Legal Knowledge and Information Systems, pages 174-183. IOS Press, 2020.

<u>Tien-Hsuan Wu</u>, Ben Kao, Zhiyong Wu, Xiyang Feng, Qianli Song, Cheng Chen. "MULCE: Multi-level Canonicalization with Embeddings of Open Knowledge Bases." Web Information Systems Engineering – WISE 2020. Lecture Notes in Computer Science, pages 315-327. Springer, 2020.

Zhiyong Wu, Ben Kao, <u>Tien-Hsuan Wu</u>, Pengcheng Yin, Qun Liu. "PERQ: Predicting, Explaining, and Rectifying Failed Questions in KB-QA Systems." Proceedings of the 13th International Conference on Web Search and Data Mining, pages 663-671. ACM, 2020.

<u>Tien-Hsuan Wu</u>, Zhiyong Wu, Ben Kao, and Pengcheng Yin. "Towards practical open knowledge base canonicalization." In Proceedings of the 27th ACM International Conference on Information and Knowledge Management, pages 883-892. ACM, 2018.

Teaching

Teaching Assistant, HKU

(2024 Fall) (2023 Fall) (2021 Fall) COMP7103 Data Mining

(2022 Spring) COMP2119 Introduction to Data Structures and Algorithm

(2019 Spring) COMP3311 Legal Aspects of Computing

(2018 Spring) COMP3278 Introduction to Database Management Systems

Awards

Jessie Ho Memorial Postgraduate Fellowship (2017)

Y S and Christabel Lung Postgraduate Scholarship for Engineering Students (2017)

Dean's Honours List (2014, 2016)

HKU Foundation Scholarships for Outstanding International Students (2013-17)

HKSAR Government Scholarship Fund (2013-17)

Mr Armin and Mrs Lillian Kitchell Scholarships (2013-17)