Waylon Li

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EDUCATION

University of Edinburgh (1st year scholarship awarded)	Edinburgh, United Kingdom
PhD candidate in AIAI, School of Informatics | Supervised by Prof. Tiejun Ma	*Feb. 2023 – Feb. 2027 (expected)*
University of Edinburgh (Distinction)	Edinburgh, United Kingdom
Master by Research in ILCC, School of Informatics | Supervised by Prof. Shay Cohen	*Oct. 2021 – Oct. 2022*
University of Edinburgh (First Class Degree)	Edinburgh, United Kingdom
Bachelor of Science in Artificial Intelligence, School of Informatics	*Aug. 2018 – June 2021*
South China University of Technology	Canton, China
Bachelor of Science in Applied Mathematics, School of Mathematics	*Aug. 2016 – July 2018*

PUBLICATIONS

Risk Ranking in Retail Trading: Leveraging Algorithms to Predict Profitability and Behaviour.
Weixian Waylon Li, Tiejun Ma. In submission to top conference.

SynthRank: Synthetic Data Generation of Individual's Financial Transactions Through Learning to Ranking.
Weixian Waylon Li, Mengyu Wang, Carsten Maple, Tiejun Ma. To appear in AI in Finance for Social Impact @ AAAI 2024.

BERT Is Not The Count: Learning to Match Mathematical Statements with Proofs. Weixian Waylon Li, Yftah Ziser, Maximin Coavoux and Shay Cohen. EACL 2023 (long paper).

CONFERENCES

Annual Meeting of the Association for Computational Linguistics (ACL) 2024	reviewer	Feb. 2024
TSDiP Workshop @ Warwick University	presenter	Jan. 2024
Conf. on Empirical Methods in Natural Language Processing (EMNLP) 2023	reviewer	July 2023
TSDiP Workshop @ Warwick University	attendee	July 2023
Conf. of the European Chapter of the ACL (EACL) 2023	presenter	May 2023
Conf. on Empirical Methods in Natural Language Processing (EMNLP) 2022	reviewer	Aug. 2022
Conf. on Empirical Methods in Natural Language Processing (EMNLP) 2021	attendee	Nov. 2021
ACL-IJCNLP 2021	attendee	July 2021
Annual Conf. of the North American Chapter of the ACL (NAACL) 2021	attendee	June 2021
World Artificial Intelligence Conference 2019	attendee	Aug. 2019
Huawei Developer Conference 2019	attendee	Aug. 2019

PROJECTS

Risk Ranking in Retail Trading: Leveraging Algorithms to Predict Profitability and Behaviour

Feb. 2023 – Dec. 2023

- Supervised by Prof. Tiejun Ma.
- **In submission to top conference.**
- Focus on the task of detecting abnormal trader behaviour from the trading market data.
- We aim at proposing a framework and applying modern ranking algorithms to this task.

Discriminative Training of LPCFGs | *Python (Pytorch, NLTK)*

June 2020 – Apirl 2021

- Supervised by Dr. Shay Cohen.
- Turned the spectral learning algorithm of syntactic parsing to a neural like model.
- Applied the tensor form of inside-outside algorithm to build a constituent parser.

Experience

Intern Strategic Researcher
May 2024 – Present

Huawei Technologies Research & Development (UK) Ltd - 2012 Laboratories
United Kingdom

- Working on strategic research related to Large Language Models (LLMs).

Research Assistant
June 2022 – Jan. 2024

The Alan Turing Institute
United Kingdom

- Working on the topic of "Synthetic Data Generation for Finance and Economics".
- Collaboration with University City College London (UCL) on time series financial data generation.

System Engineer Internship
July 2019 – Sep. 2019

International Business Machines Corporation (IBM)
Canton, China

- GF Bank Z14 mainframe upgrade project: helped with wiring installation and switching the Hardware Management Console (HMC).
- Chaozhou Sanhuan IT Consultation: attended the first meeting with Chaozhou Sanhuan as a member of the consultation team.
- Canton Mobile Server Room Maintenance: helped maintain the server models including Power 780, S814 servers, DS 8870, 8880 storages.

Data Platform Engineer
May 2019 – July 2019

China Unicom
Canton, China

- Managed the daily maintenance of the big data platform and helped with the security upgrade project.
- Participated in the internal Spark computing framework training.

Teaching

2023-2024	Introductory Applied Machine Learning	Teaching Assistant	University of Edinburgh
2023-2024	Natural Language Understanding	Demonstrator	University of Edinburgh
2023-2024	Introduction to Algorithms and Data Structures	Marker	University of Edinburgh
2022-2023	Introductory Applied Machine Learning	Teaching Assistant	University of Edinburgh
2021-2022	Introductory Applied Machine Learning	Tutor, Demonstrator	University of Edinburgh
2021-2022	Foundation of Natural Language Processing	Demonstrator	University of Edinburgh

Technical Skills

Programming Languages: Python, Java, C/C++
Deep Learning: PyTorch, Huggingface Transformers, NLTK, Pandas, NumPy, Matplotlib
Version Control: Git, GitHub, GitLab
Operating System: Linux, Mac OS, Windows