

Li Zhang

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EDUCATION

University of Pittsburgh

Doctor of Philosophy in Intelligent Systems

Pittsburgh, U.S.A.

Aug. 2024 - Apr. 2029

- Research: AI & Law
- Advisor: Prof. [Kevin Ashley](#)
- GPA: 4.0/4.0
- Courses: Large Language Models, Natural Language Processing, Machine Learning

Tsinghua University

Master of Computational Law

Beijing, China

Sep. 2019 - Jun. 2022

- Research: Computational Law

Australian National University

Study Abroad in College of Engineering and Computer Science

Canberra, Australia

Jul. 2017 - Dec. 2017

- GPA: 6.5/7.0

China University of Mining and Technology

Bachelor of Electrical Engineering

Jiangsu, China

Sep. 2015 - Jun. 2019

- GPA: 90.91/100, Ranking: 2/278

PROJECTS

LLM Alignment in Trustworthy Legal Reasoning

Pittsburgh, U.S.A

Li Zhang, Matthias Grabmair, Morgan Gray, Kevin Ashely

Aug. 2024 -

- Proposed a formal framework that decomposes the process of identifying significant distinctions between cases into three-stage reasoning tasks. Revealed the paradox that LLMs expend more computational resources on incorrect responses than correct ones, suggesting that “thinking longer” does not always mean “thinking smarter.”
- Created a multi-agent framework to generate reliable legal arguments through collaboration and reflection mechanisms, achieving a decent performance in hallucination accuracy and abstention rate.

ML-Based Prediction of Academic Performance

Pittsburgh, U.S.A

Li Zhang, Morgan Gray, Jessica Macaluso, Kevin Ashely, Scott Fraundorf

Aug. 2024 -

- Developed a machine learning model that achieved a high accuracy for law school academic performance using feature engineering and random forest regression, enabling identification of at-risk students for early interventions.
- Conducted comprehensive feature selection and statistical analysis that revealed skill-specific predictors of academic success, providing actionable insights for legal education pedagogy and personalized learning approaches.

Automated Legal Citation Correction through ML and NLP

Beijing, China

Li Zhang

Jun. 2021 - June. 2022

- Built a DynamoDB repository for structured storage of labeled citation errors, enabling iterative model refinement. Achieved 95% precision in detecting inconsistencies through feature engineering.
- Designed and deployed a scalable citation-correction system to train and host the NLP model. Partnered with legal researchers to validate outputs against the Bluebook standard.

SELECTED PUBLICATIONS

1. Thinking Longer, Not Always Smarter: Evaluating LLM Capabilities in Hierarchical Legal Reasoning[[Link](#)]

Li Zhang, Matthias Grabmair, Morgan Gray, Kevin Ashley

CS&Law 2026, in review

2. DenseMixer: Improving MoE Post-Training with Precise Router Gradient[[Link](#)]

Feng Yao, Junxia Cui, Ruohan Zhang, Liyuan Liu, Shibo Hao, **Li Zhang**, Chengyu Dong, Shuohang Wang, yelong shen, Jianfeng Gao, Jingbo Shang

ICLR 2026, in review

3. Do LLMs Truly Understand When a Precedent Is Overruled?[[Link](#)]

Li Zhang, Jaromir Savelka, Kevin Ashley

JURIX 2025

4. Mitigating Manipulation and Enhancing Persuasion: A Reflective Multi-Agent Approach for Legal Argument Generation[[Link](#)]
Li Zhang, Kevin Ashley
LCIC @ ICAIL 2025
5. Measuring Faithfulness and Abstention: An Automated Pipeline for Evaluating LLM-Generated 3-ply Case-Based Legal Arguments[[Link](#)]
Li Zhang, Morgan Gray, Jaromir Savelka, Kevin Ashley
ASAIL @ ICAIL 2025
6. Generating Case-Based Legal Arguments with LLMs[[Link](#)]
Morgan Gray, **Li Zhang**, Kevin Ashely
CS&Law 2025
7. Intelligent Proximate Analysis of Coal Based on Near-Infrared Spectroscopy[[Link](#)]
Weinan Liu, Boyuan Peng, Xiaoyu Liu, Feifan Ren, **Li Zhang***
Journal of Applied Spectroscopy, 2021

TALKS

1. Mitigating Manipulation and Enhancing Persuasion: A Reflective Multi-Agent Approach for Legal Argument Generation, 2025 Talk at [ResearchTrend.AI](#)
2. Enhancing Legal Argument Generation: From Basic Schemes to Trustworthy Multi-Agent Systems, 2025 Talk at [ISP Forum](#), the University of Pittsburgh

SKILLS

- **Programming:** Python (PyTorch, Scikit-learn, Pandas and NumPy), SQL, JavaScript
- **Cloud Technologies:** SageMaker, DynamoDB and API Gateway
- **Others:** $\text{\LaTeX}$, Markdown, Linux, Shell and Anaconda

SELECTED AWARDS & HONORS

- SCI Fellowship, University of Pittsburgh, 2024
- Dean's List (top 1%), Tsinghua Law School, 2022
- Law School Fellowship, Tsinghua Law School, 2021
- Dean's List (top 1%), China University of Mining and Technology, 2019