

Lang Cao

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Homepage: windszzlang.github.io | GitHub: github.com/windszzlang

Education

University of Illinois at Urbana-Champaign (UIUC)

Urbana, USA

Master of Science in Computer Science (Research-based Program)

Aug. 2022 - May 2024 (expected)

- Advised by [Prof. Jimeng Sun](#)
- Research Area: AI for Healthcare; Natural Language Processing
- GPA: 3.89/4.0

Wuhan University of Technology (WHUT)

Wuhan, China

Bachelor of Engineering in Software Engineering

Sept. 2018 - June 2022

- GPA: 4.351/5.0 (3.94/4.0); Rank: 1st/79

Publications

AutoAM: An End-To-End Neural Model for Automatic and Universal Argument Mining [\[Paper\]](#)[\[Code\]](#)

- **Lang Cao** (Independent Research).
- In 19th anniversary of the International Conference on Advanced Data Mining and Applications, ADMA 2023.

CBCP: A Method of Causality Extraction from Unstructured Financial Text [\[Paper\]](#)[\[Code\]](#)

- **Lang Cao**, Shihua Zhang, Juxing Chen.
- In 2021 5th International Conference on Natural Language Processing and Information Retrieval, NLPPIR 2021.

Clustering of Functionally Related Genes Using Machine Learning Techniques [\[Paper\]](#)

- Yujing Xue and **Lang Cao**.
- In 2021 5th International Conference on Compute and Data Analysis, ICCDA 2021.

Intelligent Cross-sensing Sensor Based on Deep Learning [\[Paper\]](#)

- Lingfei Xu, Jiaming Zhang, **Lang Cao**, Xinyu Hu.
- In 2021 6th IEEE International Conference on Signal and Image Processing, ICSIP2021.

PILOT: Legal Case Outcome Prediction with Case Law

- **Lang Cao**, Zifeng Wang, Cao Xiao, Jimeng Sun.
- Under Review.

DiagGPT: An LLM-based Chatbot with Automatic Topic Management for Task-Oriented Dialogue [\[Paper\]](#)[\[Code\]](#)

- **Lang Cao** (Independent Research).
- Under Review.

Enhancing Reasoning Capabilities of Large Language Models: A Graph-Based Verification Approach [\[Paper\]](#)[\[Code\]](#)

- **Lang Cao** (Independent Research).
- Under Review.

Learn to Refuse: Making Large Language Models More Controllable and Reliable through Knowledge Scope Limitation and Refusal Mechanism [\[Paper\]](#)[\[Code\]](#)

- **Lang Cao** (Independent Research).
- Under Review.

AutoRD: An Automatic and End-to-end Rare Disease Knowledge Graph Construction System Based on Ontologies-enhanced Large Language Models [\[Code\]](#)

- **Lang Cao**, Adam Cross, Jimeng Sun.
- Under Review.

LAMB: Language Spectrum as a Memory Base

- Ke Yang, **Lang Cao**.
- Under Review.

Experiences

Sunlab, UIUC

Urbana, US

Research Assistant

Jan. 2023 - Now

- Research Focus: Natural Language Processing for Applications in Healthcare and Legal.
- Projects:
 - Legal Case Outcome Prediction with Case Law
 - Large Language Models for Rare Disease Information Extraction and Potential Rare Disease Prediction
- Advisor: Jimeng Sun, Danica Xiao

LegalNow, LegalDAO (Legal AI Startup)

Beijing, China

Cofounder & AI Tech Leader

June 2023 - Now

- Individually completed the construction of an AI legal chatbot in the demo version of the product, which can assist and guide users in achieving multiple functions related to contracts drafting.
- Provided technical support and developed the overall AI framework for the first launching product.

Bioinformatics Innovation Lab (Text Group), WHUT

Wuhan, China

Research Assistant

Sept. 2020 - Jan. 2021

- Research Focus: Information Extraction and Text Mining.
- Projects: Named Entity Extraction from Biomedical Literature
- Advisor: Jing Peng

iFLYTEK CO. LTD.

Hefei, China

NLP Algorithm Engineer at Smart Car Technology R&D Division

June 2021 - Aug. 2021

- Maintained and developed an automatic data iteration algorithm for training data of smart car AI system.
- Advisor: Shen'an Li

Course: 20Spring Algorithm Design and Analysis, WHUT

Wuhan, China

Teaching Assistant

Feb. 2020 - June 2020

English Teaching Volunteer in Thailand

Chiangmai, Thailand

Educational volunteer

Jan. 2020

- Provided voluntary English teaching for 60 primary school students (35h).

Software

PyHealth [\[Github\]](#) [\[PyHeath-GPT\]](#)

- A Deep Learning Python Toolkit for Healthcare Applications.
- Work Content: developed an AI chat assistant to help new users understand and learn how to use PyHealth.

LegalNow AI Lawyer [\[Homepage\]](#)

- A smart and friendly Lawyer-Grade AI for users to create or review legal documents.
- Work Content: developed the overall AI framework. Designed and improved prompts iteratively.

Honors & Awards

- Silver Medal, top 5% in Kaggle Common Lit Readability Prize (2021.8)
- Top 2% in Alibaba Tianchi NLP Chinese Pre-training Model Generalization Ability Challenge (2021.1)
- 2nd Prize in National College Computer Ability Challenge - Artificial Intelligence Application Contest (2021.1)
- Silver Award in China College Students' "Internet Plus" Innovation and Entrepreneurship Contest (2020.9)
- National Scholarship (1%), WHUT (2020); Merit Student Model Honor (5‰), WHUT (2020); First-class Scholarship, WHUT (2021); Merit Student Honor, WHUT (2021); Outstanding Graduate, WHUT (2022.6); Outstanding Thesis, WHUT (2022.6)
- The National Champion of the FIRST LEGO League in China (2014.6); Gold Award at the Asia-Pacific Championship of the FIRST LEGO League (2016.7)

Skills

- **Programming:** Python, C/C++, Java, JavaScript, Shell
- **Machine Learning Techniques:** PyTorch, TensorFlow, Keras, Huggingface Transformers, LangChain, DGL, Scikit-learn, NumPy, Pandas
- **Software Development Techniques:** Vue.js, React.js, Node.js, Django, Flask, Express, Hadoop, SQL, MFC, QT
- **Others:** LaTeX, Markdown, Git, Linux