

Biaoyan Fang

Ph.D. Candidate (Natural Language Processing, Deep Learning)

Supervisors: Prof. Karin Verspoor and Prof. Tim Baldwin

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EDUCATION

SEPT 2018 - PRESENT **Ph.D. candidate at The University of Melbourne, VIC, Australia**

Research Area: Natural Language Processing, Information Retrieval

AUG 2014 - JUN 2018 **Bachelor of Engineering in Sun Yat-sen University, Guangzhou, China**

Major: Information Security

GPA: 3.8 /4.0 | RANKING: 1 /72

EXPERIENCE

JUN 2022 - PRESENT

Research Fellow in Bias in NLP, The University of Melbourne, VIC, Australia

Detailed achievements:

1. Created and prepared a multi-source legal dataset with a focus on the US supreme court
2. Investigated conversational behaviors in the courtroom; One related paper is under review

2020, SEMESTER 1

Tutor at School of Computing and Information Systems, University of Melbourne, VIC, Australia

Course: Natural Language Processing COMP90042

APR 2017 - JUN 2018

Research Assistant at InplusLab, Sun Yat-sen University, Guangzhou, China

Detailed achievements:

1. Utilized NLP methods for news detection task, predicting if it is written by machine
2. Implemented HTCondor distributed framework to support high throughput computing
3. Jiajing Wu, **Biaoyan Fang**, Junyuan Fang, Xi Chen and Chi K. Tse. "Sequential topology recovery of complex power systems based on reinforcement learning", In *journal: Physica A: Statistical Mechanics and its Applications*, Vol. 535, 2019

Supervisor: Prof. Zibin Zheng and A/Prof. Jiajing Wu

PUBLICATION

Biaoyan Fang, Timothy Baldwin and Karin Verspoor. What does it take to bake a cake? The RecipeRef corpus and anaphora resolution in procedural text. In *Findings of ACL 2022*, Dublin, Ireland, 2022.

Yuan Li, **Biaoyan Fang**, Jiayuan He, Hiyori Yoshikawa, Saber A. Akhondi, Christian Druckenbrodt, Camilo Thorne, Zenan Zhai, Zubair Afzal, Trevor Cohn, Timothy Baldwin and Karin Verspoor. The ChEMU 2022 Evaluation Campaign: Information Extraction in Chemical Patents. In *Proceedings of the 44th European Conference on Information Retrieval (ECIR 2022)*, Stavanger, Norway, 2022.

Biaoyan Fang* and Fajri Koto*. Context-Aware Sentence Classification in Evidence-Based Medicine. In *Proceedings of the Australasian Language Technology Association Workshop 2022 (ALTA 2022)*, Adelaide, Australia, 2022.

Biaoyan Fang, Christian Druckenbrodt, Saber A. Akhondi, Jiayuan He, Timothy Baldwin and Karin Verspoor. ChEMU-Ref: A Corpus for Modeling Anaphora Resolution in the Chemical Domain. In *Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics (EACL2021)*, virtual, pp. 1362–1375, 2021.

Jiayuan He, **Biaoyan Fang**, Hiyori Yoshikawa, Saber A. Akhondi, Christian Druckenbrodt, Camilo Thorne, Zubair Afzal, Zenan Zhai, Lawrence Cavedon, Trevor Cohn, Timothy Baldwin and Karin Verspoor. ChEMU 2021: Reaction Reference Resolution and Anaphora Resolution in Chemical Patents. In *Proceedings of the 43rd European Conference on Information Retrieval (ECIR 2021)*, virtual, 2021.

Karin Verspoor, Simon Suster, Yulia Otmakhova, Shevon Mendis, Zenan Zhai, **Biaoyan Fang**, Jey Han Lau, Timothy Baldwin, Antonio Jimeno-Yepes and David Martinez. Brief Description of COVID-SEE: The Scientific Evidence Explorer for COVID-19 Related Research. In *Proceedings of the 43rd European Conference on Information Retrieval (ECIR 2021)*, virtual, 2021.

Fajri Koto* and **Biaoyan Fang***, Handling Variance of Pretrained Language Models in Grading Evidence in the Medical Literature. In *Proceedings of the Australasian Language Technology Association Workshop 2021 (ALTA 2021)*, virtual, 2021.

Jiayuan He, Dat Quoc Nguyen, Saber A. Akhondi, Christian Druckenbrodt, Camilo Thorne, Ralph Hoessel, Zubair Afzal, Zenan Zhai, **Biaoyan Fang**, Hiyori Yoshikawa, Ameer Albahem, Lawrence Cavedon, Trevor Cohn, Timothy Baldwin and Karin Verspoor. ChEMU 2020: Natural Language Processing Methods Are Effective for Information Extraction From Chemical Patents. *Frontiers in Research Metrics and Analytics* 6, 2020.

Jiayuan He, Dat Quoc Nguyen, Saber A. Akhondi, Christian Druckenbrodt, Camilo Thorne, Ralph Hoessel, Zubair Afzal, Zenan Zhai, **Biaoyan Fang**, Hiyori Yoshikawa, Ameer Albahem, Lawrence Cavedon, Trevor Cohn, Timothy Baldwin, Karin Verspoor. Overview of ChEMU 2020: Named Entity Recognition and Event Extraction of Chemical Reactions from Patents. In *Proceedings of CLEF 2020*, pp. 237–254. 2020.

Dat Quoc Nguyen, Zenan Zhai, Hiyori Yoshikawa, **Biaoyan Fang**, Christian Druckenbrodt, Camilo Thorne, Ralph Hoessel, Saber A. Akhondi, Trevor Cohn, Timothy Baldwin and Karin Verspoor. ChEMU: Named Entity Recognition and Event Extraction of Chemical Reactions from Patents. In *Proceedings of the 42nd European Conference on Information Retrieval (ECIR 2020)*, Lisbon, Portugal, 2020.

DATASETS

Biaoyan Fang, Christian Druckenbrodt, Saber A. Akhondi, Camilo Thorne, Timothy Baldwin, Karin Verspoor. RecipeRef Corpus for Modeling Anaphora Resolution from the Procedural Text of Recipes. *Mendeley Data*, 2022

Biaoyan Fang, Christian Druckenbrodt, Colleen Yeow Hui Shiuan, Sacha Novakovic, Ralph Hössel, Saber A. Akhondi, Jiayuan He, Meladel Mistica, Timothy Baldwin, Karin Verspoor. ChEMU-Ref dataset for Modeling Anaphora Resolution in the Chemical Domain. *Mendeley Data*, 2021

SCHOLARSHIPS AND AWARDS

2022	1st Place, ALTA Shared Task 2022
2021	2nd Place, ALTA Shared Task 2021
2018-Present	Melbourne Research Scholarship
2017	1st Class Scholarship (Top 5% at school)
2017	1st Prize, The 26th Software Design Competition, Guangdong
2016	1st Class Scholarship (Top 5% at school)
2016	National Scholarship (Top 1% nationwide)
2015	Panasonic Donation Scholarship (Top 1% at school)

MISC

Language: Chinese, English

Primary Coding Language: Python

Google Scholar: <https://bit.ly/3G0gGQo>

Personal Interests: Into fitness, surfing, and tennis. Currently self-teaching keyboard.