

# Biaoyan Fang

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

Supervisors: Prof. Karin Verspoor and Tim Baldwin

EMAIL: [biaoyanf@student.unimelb.edu.au](mailto:biaoyanf@student.unimelb.edu.au)

HOME PAGE: <https://biaoyanf.github.io/>

## EDUCATION

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SEPT 2018 - PRESENT	<b>Ph.D. candidate in The University of Melbourne, VIC, Australia</b> Research Area: Natural Language Processing
AUG 2014 - JUN 2018	<b>Bachelor of Engineering in Sun Yat-sen University, Guangzhou, China</b> Major: Information Security GPA: 3.8 /4.0   RANKING: 1 /72

## EXPERIENCE

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2020, SEMESTER 1	<b>Tutor at School of Computing and Information Systems, University of Melbourne, VIC, Australia</b> Course: Natural Language Processing COMP90042
APR 2017 - JUN 2018	<b>Research Assistant at InplusLab, Sun Yat-sen University, Guangzhou, China</b> Detailed achievements: <ol style="list-style-type: none"><li>Utilized NLP methods for news detection task, predicting if it is written by machine</li><li>Implemented HTCCondor distributed framework to support high throughput computing</li><li>Jiajing Wu, Biaoyan Fang, Junyuan Fang, Xi Chen and Chi K. Tse. "Sequential topology recovery of complex power systems based on reinforcement learning", In <i>journal: Physica A: Statistical Mechanics and its Applications</i>, Vol. 535, 2019</li></ol> Supervisor: Prof. Zibin Zheng and A/Prof. Jiajing Wu

## PUBLICATION

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**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.

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.

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.

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, 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

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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)

## SKILLS

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Primary language: Python