# ZHUOWEI CHEN

■ johnny.zhuowei.chen@gmail.com 🛅 Zhuowei Chen 🕥 https://github.com/JohnnyChanV

#### Education

Guangdong University of Foreign Studies (GPA:3.78/4.00, Rank: 7/144)

Expected July 2025

Bachelor in Software Engineering

Guangzhou, China

University of California, Berkeley (GPA:4.00/4.00)

Aug.2023 - Jan.2024

Undergraduate Visiting Student

Berkeley, USA

# Research Experience

### Guangzhou Key Laboratory of Multilingual Intelligent Processing

Sept.2021 - Jan.2024

Guangzhou, China

• China-Oriented Southeastern Asia Trade Relation Analysis

Develops a system for key media monitoring, media relation graph construction, and public opinion summarization.

- Media Entity Relation Graph Construction

Built a relation extraction model based on a pre-trained language model and trained it with distantly supervised data. This project proposed a noise correction framework that enables noise labels to be updated with parameters simultaneously, and selectively aggregate sentence-level features during bag-level classification.

Hindi Pre-trained Language Model Enhancement

Fused features of dual script Hindi PLMs to get enhanced representation. Introduced and optimized multiple feature fusion methods, including concatenation, addition, and attention. Ablation studies were also conducted.

Trade-Oriented Multi-Label Sentiment Analysis

Constructed a framework for multi-label text classification based on pre-trained language model. We cast this task into a token sequence prediction task to enhance correlations between labels, and augmented the backbone BERT model with external knowledge by adding a knowledge modulation layer within BERT.

- Key Media Reports Collection

Used Scrapy and SQL to develop page crawler framework to collect key media news in corresponding nations.

#### AI Lab, Wisers Information Limited

Dec. 2023 - Present

NLP Intern

Hong Kong, China

• Hong Kong Tourism Composite

A value to describe Hong Kong tourism trends based on hotel status and tourist arrivals.

- Built LLM-based sentiment and spam analysis models for public opinions from social media.
- Applied transformer for time series regression to predict number of arrivals with features from social media contents.
- Used machine learning models for predicting future hotel prices and occupancy levels.

#### **Publications**

- [1]. Lianxi Wang, Zhuowei Chen\*, and Yujia Tian. Enhancing Hindi Feature Representation Through Fusion of Dual-Script Word Embeddings. Proceedings of the 31st International Conference on Computational Linguistics, 2024.
- [2]. Zhuowei Chen, Yujia Tian, Lianxi Wang\*, and Shengyi Jiang. A Distantly-Supervised Relation Extraction Method Based on Selective Gate and Noise Correction. China National Conference on Chinese Computational Linguistics, 2023.
- [3]. Zhuowei Chen, Huayu Huang, and Lianxi Wang\*. LAKA: A Label-Aware and Knowledge-Augmented Framework for Multi-Label Text Classification. Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics, 2024. (Under review)

## Selected Honors

First-class Scholarship, GDUFS General Scholarship, 2023

Gold Medal, Cantonese College Computer Design Competition, 2022

Silver Medal, National College Student Mathematical Modelling Competition, 2023

Silver Medal, National College Computer Design Competition, 2022

# Other Related Experience and Skills

Conference Participant. Poster presentation on The 22nd China National Conference on Computational Linguistics. Onboard Training Assistance. TA for Language Processing Technique.

Programming: Python, Java, JS/HTML/CSS, C/C++, SQL, Golang

<sup>\*</sup> represents corresponding author.