

JIXUAN CHEN

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EDUCATION

Nanjing University (NJU)

B.E. in Software Engineering (SE)

Nanjing, China

Sep 2021 - Present

- **GPA:** 92/100 (Top 2%), Overall academic ranking 1/259, National Scholarship (2022)
- **Relevant courses:** Foundation of Computing System(98), Software Testing(97), Database Management(96), Data Structures and Algorithm Analysis(94), Foundations of Data Science(94.6), AI Fundamentals and Industrial Developments(92), Discrete Mathematical Structures(94), Foundation of Computing System(98), etc.
- President, College Student Council; Advanced Individual in Student Union Organization (2022)

The Hong Kong University of Science and Technology (HKUST)

Exchange student in Computer Science (CS)

Hong Kong, China

Jan 2024 – May 2024

EXPERIENCE

HKU NLP Group

Research Assistant

Hong Kong, China

Supervised by Prof. Tao Yu

Jul 2023 – present

Research Keywords: llm-powered web agents, pretraining

- Index and search over 6TB of source code to find missing dependencies and extract test cases for sample code
- Be part of Executable Language Grounding ([XLang](#)) Lab to work on benchmarking LLM as agents on desktop environment

NLP Group of Nanjing University

Undergraduate Research Intern

Supervised by Prof. Shujian Huang

Sep 2022 – Aug 2023

Research Keywords: Neural Machine Translation, Domain Adaptation

- Developed a well-performing ancient-modern Chinese translation system based on a Siku-BERT initialized transformer
- Constructed pseudo-parallel corpus to achieve data augmentation by performing back translation of collected monolingual corpus and solved domain problems; Provided user interface of the optimized translation system

Supervised by Dr. Jiahuan Li

Jun 2022 – Aug 2022

Research Keywords: PLM for NMT

- Conducted in-depth research on Enhancing Machine Translation Using Large-scale Pre-trained Language Models (PLM)
- Completed an exhaustive case study on the translation effects of current PLM for NMT models and compared their multi-dimensional performances in Enhanced Machine Translation; Deeper fusion of PLM results in higher word sense accuracy.

PUBLICATIONS

DesktopEnv: A Unified Realistic Desktop Environment for Universal Vision-Language Digital Agents

Tianbao Xie, Danyang Zhang, Siheng Zhao, Ruisheng Cao, **Jixuan Chen**, Toh Jing Hua, Zhoujun Cheng, Dongchan Shin, Yitao Liu, Yiheng Xu, Silvio Savarese, Caiming Xiong, Victor Zhong, Tao Yu

In submission: **ICML-2024**

Dictionary Definition Augmented Neural Machine Translation for Ancient Chinese Text

Jiahuan Li, Ruochun Wu, Wenjing Hu, **Jixuan Chen**, Weilu Xu, Shujian Huang, Jiajun Chen.

Accepted by CCMT2023 (in Chinese). **Best Paper Award.**

HONORS & AWARDS

- 2022 **National Scholarship** (Top 0.2% nationwide) Oct 2022
- Kwok Shek Pik Yung Scholarship Special Award (RMB 10,000) Oct 2023
- Sixth Place in the algorithm group of EL Programming Competition, NJU Jun 2022
- Third Place in the software group of EL Programming Competition, NJU (App Development) Jun 2022
- Outstanding student of Nanjing University Dec 2022,2023

EXPERTISE AND INTERESTS

- **Languages:** Fluent in English (TOEFL iBT 96), Native speaker of Mandarin
- **Skills:** C/C++, Python, Bash, Git, Latex, Markdown, PyTorch, Java, HTML/CSS, Fairseq
- **Interests:** Calligraphy (Gr. 6), Video Editing, Table Tennis