

# Zhoujun Cheng (承洲骏)

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## EDUCATION

**Shanghai Jiao Tong University**, Shanghai, China

- M.S. in Computer Science Sep 2021 – Mar 2024 (*Expected*)
  - Supervisor: Prof. Fan Cheng
- B.S. in Computer Science (IEEE honor class) Sep 2017 – Jun 2021
  - Overall GPA: 90.3 / 100, Rank: 10 / 84

## PUBLICATIONS & PREPRINTS

- [1] **Zhoujun Cheng\***, Tianbao Xie\*, Peng Shi, Chengzu Li, Rahul Nadkarni, Yushi Hu, Caiming Xiong, Dragomir Radev, Mari Ostendorf, Luke Zettlemoyer, Noah A. Smith, Tao Yu, “Binding Language Models in Symbolic Languages ” (**ICLR 2023 Spotlight, with scores 8,8,8**)
- [2] Tianbao Xie\*, Fan Zhou\*, **Zhoujun Cheng\***, Peng Shi\*, Luoxuan Weng\*, Yitao Liu\*, Toh Jing Hua, Junning Zhao, Qian Liu, Che Liu, Leo Z. Liu, Yiheng Xu, Hongjin Su, Dongchan Shin, Caiming Xiong, Tao Yu, “OpenAgents: An Open Platform for Language Agents in the Wild ” (**Preprints 10.2023**)
- [3] **Zhoujun Cheng**, Jungo Kasai, Tao Yu, “Batch Prompting: Efficient Inference with Large Language Model APIs ” (**EMNLP 2023 Industry Track**)
- [4] **Zhoujun Cheng\***, Haoyu Dong\*, Zhiruo Wang\*, Ran Jia, Jiaqi Guo, Yan Gao, Shi Han, Jian-Guang Lou, Dongmei Zhang, “HiTab: A Hierarchical Table Dataset for Question Answering and Natural Language Generation” (**ACL 2022**)
- [5] **Zhoujun Cheng\***, Haoyu Dong\*, Ran Jia, Pengfei Wu, Shi Han, Fan Cheng, Dongmei Zhang, “FORTAP: Using Formulae for Numerical-Reasoning-Aware Table Pretraining” (**ACL 2022**)
- [6] Fan Zhou, Mengkang Hu, Haoyu Dong, **Zhoujun Cheng**, Shi Han, Dongmei Zhang, “TaCube: Pre-computing Data Cubes for Answering Numerical-Reasoning Questions over Tabular Data ” (**EMNLP 2022 Oral**)
- [7] Haoyu Dong, **Zhoujun Cheng**, Xinyi He, Mengyu Zhou, Anda Zhou, Fan Zhou, Ao Liu, Shi Han, Dongmei Zhang, “Table Pre-training: A Survey on Model Architectures, Pretraining Objectives, and Downstream Tasks” (**IJCAI 2022 Survey Track**)
- [8] Yang You, Yujing Lou\*, Chengkun Li\*, **Zhoujun Cheng**, Liangwei Li, Lizhuang Ma, Cewu Lu, Weiming Wang, “KeypointNet: A Large-scale 3D Keypoint Dataset Aggregated from Numerous Human Annotations” (**CVPR 2020**)
- [9] Yujing Lou\*, Yang You\*, Chengkun Li\*, **Zhoujun Cheng**, Liangwei Li, Lizhuang Ma, Weiming Wang, Cewu Lu, “Human Correspondence Consensus for 3D Object Semantic Understanding” (**ECCV 2020**)

## EXPERIENCE

**HKUNLP**, The University of Hong Kong, Hong Kong, China

- Research Assistant Apr 2022 – Present
  - Developed a language agent platform, including a data agent replicating the OpenAI code interpreter.
  - Incorporated LLM functionalities into symbolic language to enhance its coverage and interoperability.
  - Proposed an efficient LLM batch prompting method, cutting token and time costs by 5× under few-shot learning.
  - Advisor: Prof. Tao Yu

**Microsoft Research Asia DKI Group**, Beijing, China

- Research Assistant Dec 2020 – Apr 2022
  - Built a hierarchical table dataset for Table QA and NLG, and designed a hierarchy-aware logical form for it.
  - Enhanced tabular models with stronger numeric-reasoning skills by pretraining on spreadsheet formulas.
  - Advisor: Haoyu Dong

**Alibaba TmallSearch**, Hangzhou, China

- Engineering Intern, TmallShop Search Jul 2020 – Sep 2020
  - Implemented a commodity recommendation module for “Double Eleven Carnival”.
  - Advisor: Jin He

**MVIG Group**, Shanghai Jiao Tong University, Shanghai, China

- Research Intern Jan 2019 – Feb 2020
  - Collected a 3D keypoint dataset and explored 3D dense correspondence with different model backbones.
  - Advisor: Prof. Cewu Lu

<b>AWARDS &amp; SCHOLARSHIPS</b>	▪ National Scholarship (top 2%)	2018
	▪ Shanghai Outstanding Graduates	2021
	▪ MSRA Stars of Tomorrow	2021
	▪ 2nd Place at IBM Call for Code Hackathon, Shanghai	2019
	▪ SJTU Zhiyuan Honor Scholarship (top 5%)	2018 – 2020
<b>SERVICES &amp; TEACHING</b>	<b>Reviewer:</b> ACL Rolling Review (ARR) 2022/2023, NAACL 2022 SUKI Workshop, NeurIPS 2022/2023 TRL Workshop, ICLR 2023 DL4C Workshop, CCL 2022/2023	
	<b>Teaching Assistant:</b>	
	<ul style="list-style-type: none"> <li>▪ Introduction to Programming, Shanghai Jiao Tong University</li> <li>▪ Introduction to Machine Learning, Shanghai Pinghe High School</li> </ul>	
<b>OPEN-SOURCE PROJECTS</b>	<b>OpenAgents</b> (3k demo users, 2k stars on github)	
	<ul style="list-style-type: none"> <li>▪ (<i>Co-lead contributor</i>) An agent platform for using, hosting and building language agents, covering: <ul style="list-style-type: none"> <li>• Data Agent: data analysis by generating Python/SQL code, augmented with data tools</li> <li>• Plugins Agent: integrating 200+ third-party plugins to handle daily life scenarios</li> <li>• Web Agent: exploring websites automatically as browser extension</li> </ul> </li> </ul>	
	<b>Humanprompt</b>	
	<ul style="list-style-type: none"> <li>▪ (<i>Co-lead contributor</i>) A unified framework for LLM-prompting research: <ul style="list-style-type: none"> <li>• Modularized: the pipeline of prompting LLM is decomposed into functional modules</li> <li>• Configurable: simply write “one config, one experiment”</li> </ul> </li> </ul>	
<b>SKILLS</b>	<ul style="list-style-type: none"> <li>▪ Programming Languages: Python &gt; SQL <math>\approx</math> C/C++ &gt; Java <math>\approx</math> HTML/CSS <math>\approx</math> JavaScript</li> <li>▪ Tools &amp; Packages: Huggingface, Pytorch, LangChain, AllenNLP, Docker, Git, Vim</li> <li>▪ Languages: Native Mandarin, Fluent English (TOEFL 103)</li> </ul>	