Zhoujun Cheng (承洲骏)

Mail • Homepage • Github • Google Scholar

EDUCATION

Shanghai Jiao Tong University, Shanghai, China

■ M.S. in Computer Science

• Supervisor: Prof. Fan Cheng

■ B.S. in Computer Science (IEEE honor class)

• Overall GPA: 90.3 / 100

Sep 2021 – Mar 2024 (Expected)

Sep 2017 - Jun 2021

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] Yiheng Xu*, Hongjin Su*, Chen Xing*, Boyu Mi, Qian Liu, Weijia Shi, Binyuan Hui, Fan Zhou, Yitao Liu, Tianbao Xie, **Zhoujun Cheng**, Siheng Zhao, Lingpeng Kong, Bailin Wang, Caiming Xiong, Tao Yu, "Lemur: Harmonizing Natural Language and Code for Language Agents" (**Preprints 10.2023**)
- [4] **Zhoujun Cheng**, Jungo Kasai, Tao Yu, "Batch Prompting: Efficient Inference with Large Language Model APIs" (EMNLP 2023 Industry Track)
- [5] **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)
- [6] **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)
- [7] 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)**
- [8] 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)**
- [9] 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)**
- [10] 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.
- ullet Proposed an efficient LLM batch prompting method, cutting token and time costs by $5\times$ 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

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

AWARDS & SCHOLARSHIPS

National Scholarship (rank 2 / 109)
Shanghai Outstanding Graduates (rank 1 / 25)
MSRA Stars of Tomorrow
2021
2021
2nd Place at IBM Call for Code Hackathon, Shanghai
2019

2018 - 2020

■ SJTU Zhiyuan Honor Scholarship (top 5%)

core Empain Honor Sensition (top)

SERVICES & TEACHING

Reviewer: ACL Rolling Review (ARR) 2022/2023, EACL 2024, NAACL 2022 SUKI Workshop, NeurIPS 2022/2023 TRL Workshop, ICLR 2023 DL4C Workshop, CCL 2022/2023

Teaching Assistant:

- Introduction to Programming, Shanghai Jiao Tong University
- Introduction to Machine Learning, Shanghai Pinghe High School

OPEN-SOURCE PROJECTS

OpenAgents (2.8k stars on github, 6k demo users)

- (Co-lead contributor) An agent platform for using, hosting and building language agents, covering:
 - Data Agent: data analysis by generating Python/SQL code, augmented with data tools
 - Plugins Agent: integrating 200+ third-party plugins to handle daily life scenarios
 - Web Agent: exploring websites automatically as browser extension

Humanprompt

- (Co-lead contributor) A unified framework for LLM-prompting research:
 - Modularized: the pipeline of prompting LLM is decomposed into functional modules
 - Configurable: simply write "one config, one experiment"

SKILLS

- Programming Languages: Python > SQL \approx C/C++ > Java \approx HTML/CSS \approx JavaScript
- Tools & Packages: Huggingface, Pytorch, LangChain, AllenNLP, Docker, Git, Vim
- Languages: Native Mandarin, Fluent English (TOEFL 103)