# **Peizhong (Chill) GAO**

**Location:** Beijing, China **Mobile:** +86 19121720151 **E-mail:** gpz23@mails.tsinghua.edu.cn

## **Eduacation**



#### **Tsinghua University**

Global Innovation Exchange, Master, HCI

- **GPA:** 3.80/4.00
- **Curriculum:** Machine Learning, AIoT, HCI Technology, HRI Design, Data Analysis... -



## **Tongji University**

Bachelor of Engineering, Industrial Design (major), Arificial Intelligence (minor)

- **Ranking:** 1st in 77 **Honor:** Outstanding Graduate and Thesis **GPA:** 4.90/5.00 -
- **Curriculum:** Product and Interaction Design, Ergonomics, Python, PCB Engineering...

# **Working Experience**



#### **Microsoft Research, Asia**

[Research Intern] Natural Language Computing Group, led by Prof. Furu Wei

#### Paper: Meta Reasoning for Large Language Models

- Propose a dynamic reasoning method MRP inspired by human thinking pathway, improving LLMs performance on comprehensive benchmarks with nearly 10%, reaching SOTA among 7 popular methods.
- Implement experiments and analyze the results on 7 benchmarks and 7 baseline methods with 4 LLMs.
- Familiar with various LLM post-training tech, such as **Fine-tuning, RAG, Agent**.

#### Project: user interface and playgrounds for Kosmos and Bitnet models

• Function definition, interactive prototyping, data visualization, testing.

## Moonshot AI (Kimi) (LLM company in China)

2019-2023

2023

2024



[Algorithm Intern] Alignment Team & [Product Intern] Product Team **OS** Agent

- Grounding, mid-training and evaluation for OS agentic LLM
- LLM effect optimization of phone-call scenario
- **Develop auto-eval** pipeline to analyze model deficiencies from millions of daily user queries.
- Implemented DPO, SFT... of models, building values, metrics and benchmarks.

#### Memory System and other routing system

• Develop large and small model collaboration to maintain dynamically personalized user bios.



## **OZ intelligence** [Founder]

- Invested by MiraclePlus (YC China) with \$300k
- Brief: Cloud-End GenAI for Embodied AI
- In charge of technology direction, financing, story telling, and bussiness.



## **Future Laboratory, Tsinghua University**

[Graduate Researcher], led by Prof. Yingqing Xu

#### Paper: OdorAgent: Generate Odor Sequences... Based on Large Language Model

- Bring ideas of LLM and Generative agent to the group. Propose an agent system combining VLM and LLM for mapping movie frames and smell display device for VR movies.
- Independently design ablation experiment and user study that is praised by reviewers.

### Paper: Mul-O: Encouraging Olfactory Innovation... Development Platform

- **Develop** creativity support tools in olfactory interface of **hardware and software**, including PCB, mechanical structure, web-APP.
- Hold a hackathon for 30 people to test our creative toolkits and platform, and conduct qualitative analysis.
- In a related project, responsible for **quantitative analysis** with R language.

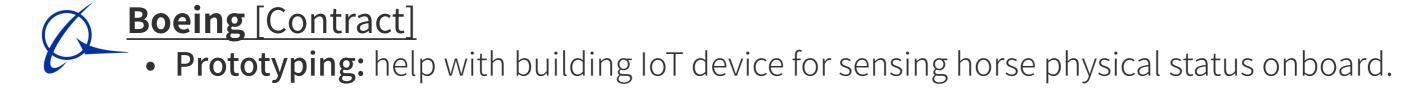
## accenture Accenture, Designaffairs Department [Research and Strategy Intern]

• User study & analysis: in POC project for Honda and Stanley, help with preparing 4 focus group (stimulus preparation, observation, recording), and 14 in-depth interview. Analyse the recording for quotes and insights.

2024

2022-2024

## • Product defination & design: help with HMI design process (ideation, user study, UX...)





2022



## **Selected Honors & Grants**

\$ 200,000 Grants for GPU, Google Grants for Tech Startup	2024
¥ 100,000 Grants, Research Grants, Tsinghua University	2024
<ul> <li>China International College Student Innovation Competition, Ministry of Education, China</li> <li>Gold Prize (less than 0.01%), Team Leader</li> </ul>	2024
Generative Al Innovation Competition, Amazon, Champion, Team Leader	2024
Outstanding graduate Award & Outstanding Bachelor's thesis Award, Tongji University	2023
First-class scholarship,Tongji University (Four times)	2019-2023
iF Design Talent Award 2022, Winner (less than 1%), Team Leader	2022

## Publication

**Gao, P.**, Liu, F., Wen, D., Gao, Y., Zhang, L., Wang, C., ... & Xu, Y. (2024, October). Mul-O: Encouraging Olfactory Innovation in Various Scenarios Through a Task-Oriented Development Platform. In Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology (pp. 1-17).

Gao, P., Xie, A., Mao, S., Wu, W., Xia, Y., Mi, H., & Wei, F. (2024). Meta Reasoning for Large Language Models. arXiv preprint arXiv:2406.11698.

Zhang, Y., **Gao, P.**, Kang, F., Li, J., Liu, J., Lu, Q., & Xu, Y. (2024, March). OdorAgent: Generate Odor Sequences for Movies Based on Large Language Model. In 2024 IEEE Conference Virtual Reality and 3D User Interfaces (VR) (pp. 105-114). IEEE.

Jin, Y., Shen, X., Peng, H., Liu, X., Qin, J., Li, J., ... & Gong, J. (2023). Surrealdriver: Designing generative driver agent simulation framework in urban contexts based on large language model. arXiv preprint arXiv:2309.13193.

Lu, Q., Zhang, Y., Zhang, Y., Ma, S. E., Zhang, Y., Qin, Y., ... & Xu, Y. (2023, April). Atmospheror: Towards an olfactory interactive system for enhancing social presence and interaction in synchronous online classes. In Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (pp. 1-8).

**Gao, P.**, Gao, T., Yang, Y., Liu, Z., Shi, J., & Li, J. (2023, February). Bamboo Agents: Exploring the Potentiality of Digital Craft by Decoding and Recoding Process. In Proceedings of the Seventeenth International Conference on Tangible,

## Reviewing

ACM CHI Conference on Human Factors in Computing Systems (CHI) 2025

ACM Conference on Intelligent User Interfaces (IUI) 2025

ACM International Conference on Tangible, Embedded and Embodied Interaction (TEI) 2025

ACM Conference on Designing Interactive Systems (DIS) 2024

ACM CHI Conference on Human Factors in Computing Systems (CHI) 2024

# **Teaching Experience**

Teaching Assistant (Summer HCI Hackathon, Tsinghua University)

• Tutored 30 students to design, develop, and present their HCI projects.

Teaching Assistant (Open-source hardware and programming & User Study, Tongji University) Fall 2022

• Tutored students to code with microcomputer and sensors, quantitative and qualitative user study

## Membership

MakerSpace Association, Tsinghua University2024• Vice President2022Student Arts Society, Tongji University2022• President2022

# Skills

<u>Code & Data</u> (Python, MATLAB, R...), <u>AI</u> (ML, signal processing, LLM, VLM...), <u>Design</u> (Adobe kits, figma...), <u>3D &</u> <u>Model</u> (Rhino, Fusion360, Unity, blender), <u>EE</u> (Altium Designer), <u>hardware</u> (esp32, Raspberry Pi, Arduino), <u>HCI</u>, <u>Academic Writing</u>



Summer 2023