Wei Huang

(+86) 18922608361 huangwei8361@qq.com

Education

Harbin Institute of Technology, Shenzhen, *Shenzhen, China* **Sept. 2021 – July 2025**
B.Eng. in Computer Science and Technology *GPA: 87/100*

Internship Experience

Tencent, Cloud & Smart Industries Group (CSIG) **Shenzhen, China**
AI Agents R&D Intern *Apr. 2025 – Present*

- Engaged in the end-to-end development of a large-scale internal Multi-Agent system, contributing to core functions such as open-source model deployment, performance evaluation, and RAG optimization.
- Engineered and fine-tuned Agent services using ByteDance's Eino framework in a Go environment, built upon an LLM + MCP + RAG architecture.
- Developed a comprehensive evaluation framework combining objective metrics with LLM-as-a-judge methodologies to assess Agent performance multidimensionally.

China Construction Bank, Qingyuan Branch **Qingyuan, China**
Information Technology Department Intern *Jan. 2024 – Mar. 2024*

- Participated in the department's daily IT operations and maintenance tasks, gaining practical insights into the workflow and technical infrastructure of a major financial institution.

Research & Project Experience

Research on Multi-modal Open-Vocabulary Video Action Recognition

- Adapted the pre-trained CLIP model for video action recognition, focusing on enhancing fine-grained perception, optimizing temporal dynamics, and preserving the model's generalization capabilities.
- Reproduced and improved upon SOTA papers such as *FROSTER*, *OpenVCLIP*, and *AWT*, conducting theoretical analysis and experimental validation of novel approaches.
- Gained proficiency in various ViT architectures, knowledge distillation, and deep learning frameworks for video understanding (e.g., SlowFast, MMAction2).

Interactive GUI Element Prediction and Automated Cybersickness Detection in VR

- Developed Python scripts to acquire, parse, and process extensive VR user data for cybersickness detection research; organized offline user studies to gather and analyze feedback.
- Implemented inference and testing code for two baseline models for GUI element prediction and adapted results to the team's evaluation framework for comparative analysis.
- Reproduced and performed domain adaptation of SOTA models like *OmniParser* (Microsoft) and *CogAgent* (Zhipu AI) for VR-specific tasks.

RISC-V Single-Core Pipelined CPU and SoC Design

- Designed, simulated, and debugged single-cycle and pipelined CPUs based on the RISC-V ISA using Verilog and Vivado, achieving full functionality on an FPGA board.
- Project was featured in the college's outstanding design showcase and received a perfect score.

Development of a Local Search Engine with Python

- Built a search engine from scratch, implementing modules for corpus preprocessing, index construction, search logic, and a simple UI. Authored a short paper on related IR and NLP topics.

Awards & Leadership

President, University-Level Student Club **Nov. 2022 – Nov. 2023**

- Managed and coordinated all affairs for a club of approximately 300 members, leading collaborations with university departments and managing publicity efforts.
- Organized numerous events that were highly praised by students and faculty, leading the club to win multiple university-level honors, including "Outstanding Student Club".

Selected Awards & Honors

- Second Prize (Top 10%), Huawei Cloud & HIT APP Design Contest Dec. 2023
- University-level "Excellent League Cadre" Sept. 2023
- University-level "Excellent League Member" Sept. 2022

Skills

Programming Languages: Python, Java, Go, Verilog
Frameworks & Libraries: PyTorch, MMAction2, SlowFast, Eino Framework
Developer Tools: Git, Vivado, Android Studio, Docker
Technical Fields: Deep Learning, Computer Vision, NLP, Multi-modal Models, Video Understanding, RAG, Multi-Agent Systems
Languages: Chinese (Native), English (IELTS: 7.5)