Jiahua Chen

jiahuachen.cs@gmail.com · Homepage · (+86) 17792897092

Education

Peking University, Beijing, China 2020.09 – 2023.06

Master student in Software Engineer
Advisor: Prof. Ke Xu, GPA: 3.35/4.0, **National Scholarship Winner**

Xidian University, Shaanxi, China 2016.09 – 2020.06

B.Sc. in Computer Science and Technology
GPA: 3.8/4.0 (Ranking 8 / 120), English: CET-6 511, **National Scholarship Winner**

Publications and Patents

Backdoor attack method and device for malicious URL detection system

- Ke Xu, Yi Zhao, **Jiahua Chen**.
- China Patent No. ZL 202310559925.9, 2023.

A Cluster-Based Adaptive Robust Collaborative Learning Method and Device

- Ke Xu, Yi Zhao, **Jiahua Chen**.
- China Patent No. ZL 202210843405.6, 2022.

Stable Evaluation Model Compatible with Heterogeneous Data

- Yuhong Cao, Yi Zhao, **Jiahua Chen**.
- Journal of Chinese Computer Systems, 2021

Experience

Beijing Sankuai Technology Co., Ltd. (Meituan) Beijing, China 2023.07 – Now

Software Development Engineer Mentor: Hongjie Duan

- Protect the lives of millions of riders in the delivery process with multiple AI metholds, for example, image recognition is used to verify whether it is the rider himself.
- Use LLM to recommend scenes / actions to improve the quality and efficiency of software development process.
- Use MobileAgent to perform software operations to simulate the process of user operation of Meituan App.

Samsung Electronics China Research Institute Beijing, China 2022.07 – 2023.01

Research Intern Mentor: Senior R&D Engineer Hanchao Jia

Research Topic: Investigating the learned knowledge of image generation and large-scale pre-trained multimodal models such as VQ-VAE, VQ-GAN, MaskGIT, etc. Testing the execution time and equipment overhead of existing models. Devising novel methods to improve the quality of image generated by models.

Tsinghua University Beijing, China 2021.02 – 2022.06

AI for Network Security Intern

- Robust Malicious URL Detection System: Aiming at the low efficiency of zero-hour malicious URL detection by the blacklist method, an efficient and robust malicious URL detection system is designed by using the user's browsing data through federated learning. A robust federated learning aggregation method is designed.
- A Stable Evaluation Model Compatible with Heterogeneous Data: Aiming at the unfair scoring phenomenon in parallel group interviews, based on the repeated improvement principle of PageRank and HITS, a stable evaluation model is established to adjust the extra-group deviation and intra-group deviation caused by group evaluation.
- Abnormal Traffic Detection Based on Machine Learning: Reproducing the classic method of abnormal traffic detection Kitsune. Then the graph neural network is used for abnormal traffic detection, and the abnormal traffic window size is used as an indicator of the adjacency matrix in the computational graph neural network.

Honors and Awards

Excellent Graduate, Peking University and Beijing Municipal Education Commission	2023.07
Award for Academic Excellence, Peking University	2022.10
National Scholarship, Ministry of Education	2021.10
Merit Student Pacesetter, Peking University	2021.10
National Scholarship, Ministry of Education	2019.11
First Prize, The Chinese Mathematics Competitions	2018.11