Qiaoyin GAN

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EDUCATION

Chinese Academy of Sciences   **Beijing, China**

- *Master, Institute of Computing Technology (Offer Holder)*   *Expected June 2026*

Tsinghua University   **Beijing, China**

- *B.Eng. Computer Science and Technology*   *Expected June 2023*
  - Cumulative GPA: **3.75/4.00**
  - Relevant Course: Computer Network Security Technology(**A+**), Java Program Design and Training(**A+**), Digital Logic Experimentation(**A+**), Theory of Computer Network(**A**), Computer Network Special Training(**A**), Foundation of Object-Oriented Programming(**A**), Probability and Statistics(**A**), Cybersecurity Fundamentals(**A**)

PROFESSIONAL EXPERIENCE

Kuaishou Technology   **Beijing, China**

- *Machine Learning Intern*   *Jun - Aug 2022*
  - Compared the performance of *Dask* and *Ray* distributed framework, and verified the support and implementation of distributed DNN on *Ray*
  - Carried out training and transplantation of *Ray* cluster distributed DNN and other experiments, completed the final framework of distributed pytorch training on *KStudio* platform

RESEARCH EXPERIENCE

Institute of Computing Technology, Chinese Academy of Science   **Beijing, China**

- *Undergraduate Researcher*   *Feb 2023 - Present*
  - Carried out my undergraduate graduation project, realized a recommendation system based on intelligent network card unloading acceleration, and added the part about ANN search based on an *OSDI'22* paper

Knowledge Engineering Group, Tsinghua University   **Beijing, China**

- *Undergraduate Researcher*   *Jul - Aug 2022*
  - Tested the zero-shot learning performance of the multi-language pretrained model *mGLM* against the standard model, and contributed relevant experimental data to the *mGLM* project

Network Technology Research Institute, Tsinghua University   **Beijing, China**

- *Undergraduate Researcher*   *Dec 2020 - Jun 2022*
  - Participated in the data visualization of the paper on adaptive low-cost traffic engineering based on traffic matrix classification, which is under review of *IEEE/ACM Transactions on Networking*

PROJECTS

FPGA-accelerated EBR System   **Beijing, China**

- *Graduation Project*   *Feb 2023 - Present*
  - Improved the performance of the recommendation system by improving the speed of retrieving stage based on both KNN and ANN, achieved higher performance than *Faiss* developed by *Facebook AI*

Expression Transformer with Pretrained Models   **Beijing, China**

- *Course Project*   *Nov - Dec 2021*
  - Designed dataset containing different examples of expression evaluation tasks, tested the performance of the model on different tasks and explored its generalization power as the data size changes. Added annotation of intermediate results and improved the accuracy of the model

5-Stage Pipeline RISC-V CPU   **Beijing, China**

- *Course Project*   *Oct - Nov 2021*
  - Implemented a 5-stage pipeline architecture CPU, which can support interrupt, exceptions, TLB, dynamic branch prediction, VGA and Flash with 40MHz main frequency

IEKG: APP of Intelligent Education based on Knowledge Graph   **Beijing, China**

- *Course Project*   *Aug - Sept 2021*
  - Implemented an application to query the relevant information in the knowledge map of basic education, which participated in the *Knowledge Graph Intelligent Education Application Competition* and won the 7th place

SKILLS

- **Languages:** Mandarin Chinese (native), English (fluent)

- **Programming:** C/C++, Python, Java, Rust, Verilog, VHDL, MATLAB, HTML/JS/CSS, etc.