Jiayi Liao

Email: ljy0ustc@mail.ustc.edu.cn
Address:University of Science and Technology of China, 96 Jinzhai Road – 230026 Hefei – P.R.China
Mobile: +86-18008097133

EDUCATION

- **University of Science and Technology of China**   B.S. in Computer Science and Technology
  GPA: 3.91/4.30; Rank:15/254(5.9%)   *Sept 2019 - June 2023(expected)*

  Courses:*Data Structures(95), Algorithms(92),Computer Organization(93) Networking(92),Compiling(92), Operating Systems(88), Artificial Intelligence, Databases*

HONORS AND AWARDS

- Huayu Scholarship(rank 3rd in CS department) - 2021
- Outstanding Student Scholarship in USTC - 2020
- The Second Prize of National Olympiad in Informatics of Sichuan Province - 2016&2017

EXPERIENCE

- **Research**   Lab in USTC
  Machine Learning and Recommender System   *Sep 2021 - present*
    - **Federated Recommender System**: Model the recommender system as an contextual bandit problem and minimize the regret with LinUCB in the client-server setting to deal with explore and exploit problem.
    - **Bias and Debias**: Combating selection bias in recommender system with Inverse Propensity Score.

- **Ada Camp**   MSRA (Microsoft Research in Asia)
  Participant   *Aug 2021 - Nov 2021*
    - **Research**: on Named Entity Recognition and Entity Linking.
    - **Create**: a Bert-LiSTM-CRF NER tool with kashigari.
    - **Explore**: the Knowledge-based News Recommender with DKN.

- **Data Science Online Winter School**   Imperial College
  Grade: 94/100 bursary place   *Jan 2021 - Feb 2021*
    - **Project Course**: Tumour classification with CNN-model.
    - **Tutorial**: Introduction to Machine Learning for Data Science.

- **Trainee as client manager**   ICBC
  Work in department of company business assessing the financial status of enterprises.   *June 2020 - July 2020*

- **Harvard Summit for Young Leader in China(HSYLC)**   Shanghai
  Participant   *Aug 2019*
    - **Camp**: Allows me to get familiar with the teaching style of top university and communicate with students in Harvard.

COURSE PROJECTS

- **Web Info**: Create a search engine with TF-IDF supporting Bool Search and Semantic Search. Complete the Knowledge Graph(predict the tail entity) with Word2Vec to exploit the textual information of entities and relations and TransE to explore the information in the graph structure. Create a Music Recommender System for Douban data with Collaborative Filtering.

- **Database**: Build from scratch a B/S framework Bank Management System with Django and Mysql supporting the insertion,deletion,edition and selection of clients,accounts,loans and business analysis of each branch.

- **Compiling**: Build from scratch a compiler of C-minusf supporting lexical analysis, grammar analysis, code generation, and optimization with Flex,Bison,LLVM-IR and C++.

- **Computer Organization**: Design a pipeline CPU with Verilog supporting data cache with replacing strategy of LRU and FIFO and branch prediction with BTB and BHT.

SKILLS AND INTERESTS

- **TOEFL**:   102(total), R28, L 28, S 21, W 25
- **Professional Language**:   Python, C/C++, SQL, Verilog, Matlab,Go,HTML/CSS
- **Framework**:   Pytorch,Django,Flask
- **Tools**:   Docker, GIT, MySQL,Vivado
- **Platforms**:   Linux, Windows
- **Research Area (Expecting)** :   Recommender System, Natural Language Processing
- **Other**:   Sketch (provincial level 8 of Art), Dancing(performed on 10+ stages), swimming (won medals at provincial level)

EXTRACURRICULAR ACTIVITIES

- **Head of the academic department**   the Student Union in USTC
  Organize lectures of electromagnetism and experience sharing of switching majors.   *Sep 2020 - June 2021*