Yiding Chang

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Expected graduation time: December 2023

EDUCATION

Carnegie Mellon University Sep 2022 - Dec 2023

Information Networking, Master Information Networking Institute

- **Courses**: Cloud Computing, Introduction to Computer Systems, Principles of Software Construction

Shanghai Jiao Tong University Sep 2018 - Aug 2022

Electronic and computer engineering, Bachelor University of Michigan - Shanghai Jiao Tong University Joint Institute

- **GPA:** 3.79/4.00
- **Honors/Awards:** The John Wu & Jane Sun Sunshine Scholarship (2021), The Sam and Daisy Wu Scholarship (2020), The Yu Liming Scholarship (2019)
- **Publication:** *Affinitive Diversity-Aware Task Allocation in Spatial Crowdsourcing,* second author, at the 2020 IEEE International Conference of Web Services (IEEE ICWS 2020)

WORK EXPERIENCE

University of Michigan-Shanghai Jiao Tong University Joint Institute Jan 2021 - Dec 2021

Teaching assistant Shanghai

- Worked as teaching assistants in three courses in different disciplines, including Intro to Operating Systems
- Won the 2020 Excellent Teaching Assistant Award

Intel Asia-Pacific Research & Development Ltd. Mar 2021 - Sep 2021, Feb 2022 - Jul 2022

BigDL Group Intern Shanghai

- Worked on privacy preserving big data analysis and machine learning in the BigDL team
- Designed and implemented a secure private set intersection service capable of handling data with volumes over 50k
- Ensured the kickoff of Alibaba Cloud Tianchi Academic Competitions by providing support on Intel Software Guard Extensions device plugin for Kubernetes
- Oversaw the updating and testing of BigDL scripts to migrate from a 2018 library-OS dependency to a recent one
- Verified and improved the functionality of trusted Big Data analytics Spark and Flink applications on Graphene and Occlum.

EXTRACURRICULAR ACTIVITIES

Multi-threaded database system development (C++) Oct 2020 - Nov 2020

Team leader Shanghai

- Led a team of three to develop a Linux database system that supports reading queries from files, adding and deleting records, summing, subtracting, duplicating records, finding maximum/minimum values, importing/exporting tables, etc.
- Improved access speed by 400% by implementing multiple optimization methods and using thread pool to shift to multi-threading, compared to the single-thread version
- Enforced Git usage within the team to ensure effective source code management

Linux Shell design and development (C programming language) Sep 2020 - Oct 2020

Independent development Shanghai

- Developed a Linux Shell supporting features such as bash style input/output redirection, pipelining, Ctrl+C, Ctrl+D, quotation marks in commands, branch input instructions, background operation instructions, etc.
- Realized kernel space and user space interaction using system calls and signal handling

SKILLS LIST

Languages: C (proficient), C++ (proficient), Python (proficient), Java (familiar), SQL(familiar), VerilogHDL (proficient)

Tools: Helm (proficient), Kubernetes (familiar), MATLAB (familiar), Bash (familiar), Mapreduce (familiar)