MING LI

I liming20@mails.ucas.ac.cn ⋅ **(**+86) 17822001471 ⋅ **(** http://liming95.github.io

EDUCATION

Master in Computer Systems Organization

Sep 2020 - Jun 2023

Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China

Thesis: The Architecture Design and Optimization of Service Mesh Based on DPU(Data Processing Unit)

Advisor: Guihai Yan

Bachelor in Software Engineering

Sep 2014 – Jun 2020

School of Software Engineering, Tianjin University, Tianjin, China

Advisor: Youmeng Li

EXPERIENCE

YUSUR Technology Co., Ltd. Beijing, China

June 2023 - Present

Cloud-native Fundamental Software Group, Software Engineer

Manager: Mingliang Huang

Brief introduction:

- Designed and developed data flow control based on the proxy, Envoy, for proprietary RPC protocol
- Optimized the end-to-end latency of data transmission
- Validating the offloading of the application proxy's data path to VPP (Vector Packet Processing)

Institute of Computing Technology, CAS. Beijing, China

Mar 2022 – May 2023

State Key Laboratory of Computer Architecture, postgraduate

Mentor: Guihai Yan

Brief introduction: Researched on building the service mesh based on DPU

Institute of Computing Technology, CAS. Beijing, China

June – Dec 2021

State Key Laboratory of Computer Architecture, postgraduate

Mentor: Wenyan Lu

Brief introduction: Participated in the design of hardware assistant virtualization for DPU based on SRIOV

Honors and Awards

Outstanding Scholarship of Institute of Computing Technology The Second Prize Winner in Customized Computing Challenge 2022

2022

PATENT

A method, apparatus, and device for resource scheduling

PUBLICATIONS

Ming Li, Wenyan Lu, Hanyue Lin, Jingya Wu, Yu Zhang, Guihai Yan. FlatProxy: A DPU-centric Service Mesh Architecture for Hyperscale Cloud-native Application. arXiv. 2024

Haishuang Fan, **Ming Li**, Jingya Wu, Wenyan Lu, Xiaowei Li, Guihai Yan. BitColor: Accelerating Large-Scale Graph Coloring on FPGA with Parallel Bit-Wise Engines. Proceedings of the 52nd International Conference on Parallel Processing. 2023.

White Paper (corporation)

Guihai Yan, Wenyan Lu, Jinya Wu, Hao Kong, Weiyue Zhao, Haishuang Fan, Yunkun Liao, Yujun Zhang, **Ming Li**, Yan Chen, Yu Zhang, Xiaofei Yuan, Huimin Cui. The technical White Paper of Data Processing Unit. Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China. 2021. [In Chinese]

GuiHai Yan, Wenyan Lu, Yujun Zhang, Jinya Wu, Hao Kong, Weiyue Zhao, Haishuang Fan, Yunkun Liao, **Ming Li**, HanYue Lin, Liyun Cheng, Shuai Gu, Mingliang Huang, et al. DPU Benchmark Methodology and Implementation. Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China. 2022. [In Chinese]