

刘运卓

我的研究方向主要包括分布式训练,可编程网络和容器网络。(主页:https://liu445126256.github.io/)

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John Hopcroft中心,导师: 江波,预期毕业时间: 2025-03

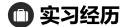
所获奖项:2019全国研究生数学建模大赛三等奖,2020华为奖学金,2023华为奖学金

2015.9-2019.6 上海交通大学 本科,信息安全

专业排名: 21/97 CET4/CET6成绩: 622/666 TOEFL成绩: 107 所获奖项: 2016, 2017, 2018校级奖学金, 2018全国大学生信息安全竞赛二等奖

🕜 论文成果

- Yunzhuo Liu, Junchen Guo, Bo Jiang, Yang Song, Pengyu Zhang, Rong Wen, Biao Lyu, Shunmin Zhu, Xi nbing Wang, "FastIOV: Fast Startup of Passthrough Network I/O Virtualization for Secure Containers". (in submission, 2024)
- Yunzhuo Liu, Junchen Guo, Pengyu Zhang, Bo Jiang, Xiaoqing Sun, Yang Song, Wei Ren, Zhiyuan Hou, Biao Lyu, Rong Wen, Shunmin Zhu, Xinbing Wang, "Understanding Network Startup for Secure Container s in Multi-Tenant Clouds: Performance, Bottleneck and Optimization". (in submission, 2024)
- Yunzhuo Liu, Hao Nie, Hui Cai, Bo Jiang, Pengyu Zhang, Yirui Liu, Yidong Yao, Xionglie Wei, Biao Lyu, C henren Xu, Shunmin Zhu, Xinbing Wang, "X-Plane: A High-Throughput Large-Capacity 5G UPF". (MobiCo m 2023, CCF-A)
- Peirui Cao, Shizhen Zhao, Dai Zhang, Zhuotao Liu, Mingwei Xu, Min Yee Teh, **Yunzhuo Liu**, Xinbing Wan g, Chenghu Zhou, "Threshold-Based Routing-Topology Co-Design for Optical Data Center". (ToN 2023, C CF-A)
- Yunzhuo Liu, Bo Jiang, Shizhen Zhao, Tao Lin, Xinbing Wang, Chenghu Zhou, "LIBRA: Contention-Awar e GPU Thread Allocation for Data Parallel Training in High Speed Networks". (INFOCOM 2023, CCF-A)
- Yunzhuo Liu, Bo Jiang, Tian Guo, Zimeng Huang, Wenhao Ma, Xinbing Wang, Chenghu Zhou, "FuncPip e: A Pipelined Serverless Framework for Fast and Cost-efficient Training of Deep Learning Models". (Sigm etrics 2023, CCF-B)
- Zimeng Huang, Bo Jiang, Tian Guo, **Yunzhuo Liu**, "Measuring the Impact of Gradient Accumulation on Cloud-based Distributed Training". (CCGrid 2023, CCF-C)
- Peirui Cao, Shizhen Zhao, Min Yee Teh, **Yunzhuo Liu**, Xinbing Wang, "TROD: Evolving From Electrical Da ta Center to Optical Data Center". (ICNP 2021, CCF-B)
- Yunzhuo Liu, Bo Jiang, Tian Guo, Ramesh K. Sitaraman, Don Towsley, Xinbing Wang, "Grad: Learning for Overhead-aware Adaptive Video Streaming with Scalable Video Coding". (ACM Multimedia 2020, CCF-A)



2023.5-至今 研究型实习生

阿里云云网络

2022.10-2023.5

阿里巴巴达摩院XG实验室

研究型实习生

研究基于可编程网络硬件的5G UPF优化加速,结合RD MA协议解决可编程网络硬件面临的资源不足问题。

定位并优化面向安全容器的软件/硬件协助虚拟化的网络设备启动速度瓶颈,实现网络的高并发、快速启动。

◆ 专利发表

- CN202310791299.6《数据包处理方法、系统、设备和存储介质》**刘运卓**,蔡慧,聂浩,刘一锐,尹俊,张鹏宇,祝顺民,江波
- CN202310636410.4《数据访问控制方法、车辆控制方法及设备》**刘运卓**,蔡慧,聂浩,刘一锐,尹俊,张鹏宇,祝顺民,江波
- CN202310730147.5《缓存数据的处理方法、设备及系统》聂浩,**刘运卓**,蔡慧,刘一锐,尹俊,张鹏宇,祝顺民,江波,许辰人
- CN202310141043.0《数据转发方法、流表处理方法、设备及系统》聂浩,刘一锐,尹俊,**刘运卓**,蔡慧,张鹏宇,祝顺民
- CN202310195735.3《流表处理方法、系统、设备和存储介质》刘一锐,蔡慧,尹俊,聂浩,**刘运卓**,张鹏宇,祝顺民
- CN202310277919.4《基于流表的数据处理方法、系统、设备和存储介质》 刘一锐,蔡慧,尹俊,聂浩,**刘运卓**,张鹏宇,祝顺民
- CN202211199807.3《节点控制方法、装置、处理系统》彭媛媛,赵世振,王景燕,**刘运卓**,韩昕驰
- CN202210110770.6《一种全局流级别网络仿真方法、系统及装置》曹培睿,赵世振,林圣凯,韩昕驰,**刘运卓**
- CN202210203493.3《一种用于分布式AI集群的网络仿真方法及装置》林圣凯, 赵世振, 曹培睿, 韩昕驰, **刘运卓**
- CN201911161704.6《一种基于流量的自反馈恶意软件监测系统和方法》邹福泰,王林,肖佳伟,**刘运卓**,尹凯涛,吴越