Qiutong Men

https://qmcurtis.me

Apr. 2022 - Aug. 2022

EDUCATION • New York University PhD, Computer Science, Supervisor: Aurojit Panda. Sept. 2024 - Now • New York University Shanghai BS (with Dean's Award, top-1 in the department), Computer Science; Minor in Maths; GPA: 3.84/4. Sept. 2020 - Dec. 2023 • New York University Sept. 2022 - Aug. 2023 Visiting PUBLICATION • Heimdall: Towards Risk-Aware Network Management Outsourcing NDSS '25 Y. Wang, Q. Men, Y. Chen, J. Liu, G. Chen, Y. Zhang, G. Liu, V. Sekar • ConfMask: Enabling Privacy-Preserving Configuration Sharing via Anonymization SIGCOMM '24 Y. Wang, Q. Men, Y. Xiao, Y. Chen, G. Liu • [Poster] FTMesh: Efficient Fault Tolerance for Interactive Applications on Service Mesh SOSP '23 SRC Q. Men. Advisors: G. Liu, A. Panda. PROFESSIONAL EXPERIENCE • ByteDance Feb. 2024 - Aug. 2024 AML - Software R&D Engineer • Working on Machine Learning Platform and the Ark (Model-as-a-Service platform) in Volcengine. • Pushing the performance improvement and standardization of the observability infrastructure of both platforms. Responsible for the design, and implementation of the performance dashboard and alerting system in the model fine-tuning business. • Pushing the design and implementation of the hyper-parameter tuning module in the model fine-tuning business. Contributing to the storage and transmission optimization of fine-tuning procedure. • Familiar with Kubernetes ecosystem and Prometheus ecosystem. Experience with NVIDIA DCGM and Megatron Framework. • Privoce, Inc. June. 2021 - Sept. 2021 Fullstack Engineer Intern • Lead the development of a social network Chrome extension product from scratch, including React-based front-end, SpringBoot-based back-end, and Neo4j graph database. Research Experience • Efficient Fault Tolerance for Microservice-based Interactive Applications May. 2023 - Jan. 2024 Advisors: Aurojit Panda, Guyue Liu • Conduct motivational performance investigations of open-source applications. • Design and implement the Sidecar-based synchronization and transparent re-routing mechanism on top of Istio/Envoy. • Preliminary result accepted as poster in SOSP '23 SRC, preparing for full paper submission. • Privacy-Preserving Configuration Sharing via Anonymization Dec. 2022 - May. 2023 Advisor: Guyue Liu • Improve the time complexity of anonymization algorithm leveraging routing protocol properties. • Participate in the implementation of the end-to-end network configuration anonymization system. • Lead the evaluation of performance and effectiveness of our system. • Work gets published at SIGCOMM 2024. Sept. 2022 - Oct. 2023 • Risk-Aware Network Management Outsourcing Advisor: Guyue Liu • Implement a proof-of-concept reference monitor system for network management. • Implement a easily scalable GNS3 testbed for pilot study of the system.

• Work gets published at NDSS 2025.

• eBPF-based Container Privilege Monitoring and Management Tool

- Leverage the raw tracepoint syscall_enter in Linux kernel to efficiently filter all syscalls, instead of hooking separately.
- Design and implement the end-to-end system using BPF-C and Rust with Docker. Consider container lifecycle to avoid record loss. Support exporing SECCOMP configuration.
- Conduct performance and effectiveness evaluation, observe that 30% 60% syscalls privilege untouched during testing execution.

Award & Scholarship

Dean's Award in Computer Science, Data Science and Engineering $(1/100 \text{ per year})$	2024
NYU Shanghai Excellent Graduate	2024
NYU Shanghai Recognition Award (with \$5500 scholarship)	2023
NYU Shanghai Dean's List for Academic Year	2021, 2022, 2023
NYU Shanghai Dean's Undergraduate Research Fund (with grant of \$1000)	2021, 2022
China System Capability Contest in OS Feature Designing - Final Round, Excellence Award	2022
COMAP Mathematical Contest in Modeling Honorable Mention	2022
3rd ByteDance Youth Camp Backend Track Advanced Group - Team of Innovation	2022
Xiaomi Online Judge - Excellent Volunteer	2018
National Olympics in Informatics Winter Camp - 3rd Prize	2019
National Olympics in Informatics in Provinces - 1st Prize	2018
Xiaomi National Collegiate Programming Contest - Bronze Medal	2018