Jiaxin Lei

CONTACT INFORMATION

Computer Science and Technology
Kean University
1000 Morris Avenue
Union, New Jersey, 07083
https://jiaxinraylei.github.io

Phone: (607) 232-1934
Email: jlei@kean.edu

RESEARCH INTERESTS

Cloud Computing, Networking Systems, Reconfigurable/Disaggregated Hardware, AI Infrastructure.

WORK EXPERIENCE

Assistant Professor — Sep. 2024 - Present
Kean University — Union, NJ

Research and Teaching Assistant — Aug. 2023 - Aug. 2024
The University of Texas at Arlington — Arlington, TX

Research and Teaching Assistant — Jan. 2019 - Aug. 2023
State University of New York at Binghamton — Binghamton, NY

EDUCATION

The University of Texas at Arlington — Aug. 2023 - Aug. 2024
Ph.D. in Computer Science — Arlington, TX
Advisor: Prof. Hui Lu

State University of New York at Binghamton — Jan. 2019 - Aug. 2023
Ph.D. Candidate in Computer Science — Binghamton, NY
Advisor: Prof. Hui Lu

State University of New York at Binghamton — Sep. 2017 - Dec. 2018
M.S. in Computer Science — Binghamton, NY

Beijing University of Posts and Telecommunications — Sep. 2013 - May. 2017
B.E. in Telecommunications Engineering — Beijing, China

PUBLICATIONS

Jiaxin Lei, Manish Munikar, Hui Lu, Jia Rao, "SmartNIC-assisted Network Packet Zero-Copying", *In Submission*, 2024.

Manish Munikar, **Jiaxin Lei**, Hui Lu, Jia Rao, "ECON: Expedited Container Overlay Network", *In Submission*, 2024.

Jiaxin Lei, Manish Munikar, Hui Lu, Jia Rao, "Accelerating Packet Processing in Container Overlay Networks via Packet-level Parallelism", In *37th IEEE International Parallel and Distributed Processing Symposium (IPDPS '23)*, St. Petersburg, FL, USA.

Manish Munikar, **Jiaxin Lei**, Hui Lu, Jia Rao, "PRISM: Streamlined Packet Processing for Containers with Flow Prioritization", In *42nd IEEE International Conference on Distributed Computing Systems (ICDCS '22)*, Bologna, Italy.

Jiaxin Lei, Manish Munikar, Kun Suo, Hui Lu, Jia Rao, "Parallelizing packet processing in container overlay networks", In *16th ACM European Conference on Computer Systems (EuroSys '21)*, Virtual.

Yu Sun, **Jiaxin Lei**, Seunghee Shin, Hui Lu, "Baoverlay: a block-accessible overlay file system for fast and efficient container storage", In *11th ACM Symposium on Cloud Computing (SoCC '20)*, Virtual.

Jiaxin Lei, Kun Suo, Hui Lu, Jia Rao, "Tackling parallelization challenges of kernel network stack for container overlay networks", In *11th USENIX Workshop on Hot Topics in Cloud Computing (HotCloud '19)*, Renton, WA, USA.

Teaching

Instructor – CPS 3250 Computer Operating Systems — Fall 2024
Enrollment: 37 undergraduate students (2 sections)
Kean University — Union, NJ

Instructor – TECH 2920 Computer Systems — Fall 2024
Enrollment: 20 undergraduate students
Kean University — Union, NJ

Instructor – CSE 3320 Operating Systems (Lab) — Fall 2023
The University of Texas at Arlington — Arlington, TX

Instructor – CS 350 Operating Systems (Lab) — Spring 2023
State University of New York at Binghamton — Binghamton, NY

Instructor – CS 350 Operating Systems (Lab) — Fall 2022
State University of New York at Binghamton — Binghamton, NY

Instructor – CS 350 Operating Systems (Lab) — Spring 2022
State University of New York at Binghamton — Binghamton, NY

Teaching Assistant – CS 452/552 Introduction to Cloud Computing — Fall 2021
State University of New York at Binghamton — Binghamton, NY

Instructor – CS 350 Operating Systems (Lab) — Spring 2021
State University of New York at Binghamton — Binghamton, NY

Teaching Assistant – CS 452/580 Introduction to Cloud Computing — Fall 2020
State University of New York at Binghamton — Binghamton, NY

Teaching Assistant – CS 480/580 Advanced Topics in Cloud Computing — Spring 2020
State University of New York at Binghamton — Binghamton, NY

Instructor – CS 350 Operating Systems (Lab) — Fall 2019
State University of New York at Binghamton — Binghamton, NY

Teaching Assistant – CS 550 Operating Systems — Spring 2019
State University of New York at Binghamton — Binghamton, NY

Talks

"Accelerating Packet Processing in Container Overlay Networks via Packet-level Parallelism"
— In *IPDPS '23*, St. Petersburg, FL, USA — May. 2023

"Accelerating Packet Processing in Container Overlay Networks"
— In *SUNY Binghamton Computer Science Department Seminar*
Binghamton, NY, USA — Nov. 2022

"Parallelizing Packet Processing in Container Overlay Networks"
— In *EuroSys '21*, Virtual — Apr. 2021

"Tackling parallelization challenges of kernel network stack for container overlay networks"
— In *HotCloud '19*, Renton, WA, USA — Jul. 2019