Zexin Li

Portfolio: zexinli.com

Github: github.com/zexinli0w0

EDUCATION

University of California, Riverside

Ph.D. student of Electronic Engineering; GPA: 4.00/4.00; Advisor: Cong Liu

University of Texas at Dallas

Ph.D. student of Computer Science; GPA: 3.83/4.00; Advisor: Cong Liu

Aug 2022 - Now

Richardson, Texas, USA

Aug 2020 - Aug 2022

Southern University of Science and Technology

Bachelor of Computer Science and Technology; GPA: 3.57/4.00; Advisor: Yugun Zhang

July 2016 - July 2020

Industrial Experience

Tencent Shanghai, China
Research Internship May 2021 - Dec 2021

- Responsibility: Worked at Tencent Youtu Lab which focuses on advanced research on face recognition robustness.
- Research: Research on transferable adversarial attack on face recognition systems.

Kwai Research & Development Internship Shenzhen, China Nov 2019 - Jul 2020

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- Responsibility: Worked at Peer Content Delivery Network (PCDN) team which aims to develop and maintain PCDN system, involving technical stack: C++, C and Docker.
- Research: Research on Peer Content Delivery Network (PCDN) optimization, including system-level optimization and application-level optimization.
- Engineering: Updated the internal web protocol framework in PCDN backend to boost overall transmission speed of videos and decrease the retransmission ratio. Wrote tests for the backend service and deploy grey testing for over 10,000 third-party edge devices.

PUBLICATIONS

- MIMONet: Multi-Input Multi-Output On-Device Deep Learning.: Zexin Li, Xiaoxi He, Yufei Li, Shahab Nikkhoo, Wei Yang, Lothar Thiele, Cong Liu (submitted to ICRA'2024) [PDF]
- R³: On-device Real-Time Deep Reinforcement Learning for Autonomous Robotics.: Zexin Li, Aritra Samanta, Yufei Li, Andrea Soltoggio, Hyoseung Kim, Cong Liu (RTSS'2023)
- RED: A Systematic Real-Time Scheduling Approach for Robotic Environmental Dynamics.: Zexin Li, Tao Ren, Xiaoxi He, Cong Liu (RTSS'2023)
- PIMbot: Policy and Incentive Manipulation for Multi-Robot Reinforcement Learning in Social Dilemmas.: Shahab Nikkhoo, Zexin Li, Aritra Samanta, Yufei Li, Cong Liu (IROS'2023) [PDF]
- White-Box Multi-Objective Adversarial Attack on Dialogue Generation.: Yufei Li, Zexin Li, Yingfan Gao and Cong Liu (ACL'2023) [PDF]
- Dynamic Transformers Provide a False Sense of Efficiency.: Yiming Chen, Simin Chen, Zexin Li, Wei Yang, Cong Liu, Robby Tan and Haizhou Li (ACL'2023) [PDF]
- Sibling-Attack: Rethinking Transferable Adversarial Attacks against Face Recognition.: Zexin Li*, Bangjie Yin*, Taiping Yao, Junfeng Guo, Shouhong Ding, Simin Chen, Cong Liu (CVPR'2023) [PDF]
- Efficient algorithms for task mapping on heterogeneous CPU/GPU platforms for fast completion time.: Zexin Li, Yuqun Zhang, Ao Ding, Husheng Zhou, Cong Liu (JSA'2021) [PDF]

Professional Service

- Conference reviewer: IEEE RTSS subreviewer, ICONIP.
- Journal reviewer: IEEE TPAMI, IEEE TNNLS, PPNA.

Honors and Awards

- Travel Grant from Graduate Student Assosciation, University of California, Riverside Aug, 2023
- Dean's Distinguished Fellowship, University of California, Riverside May, 2022
- Tencent Rhino-BirdElite Talent Training Program, Tencent May, 2021
- Outstanding Student Scholarship, Southern University of Science and Technology Nov, 2019
- Special Funds for the Cultivation of Guangdong College Students' Scientific and Technological Innovation Mar, 2019
- Special Funds for the Cultivation of Guangdong College Students' Scientific and Technological Innovation Mar, 2018

ACADEMIC SUPERVISION AND MENTORSHIP

- Fengfan Zhou: HUST CS, 2023–Current (Project; Current Ph.D. student at HUST)
- Tao Ren: UCR EE, 2023-Current (Co-author; Current Ph.D. student at UCR)
- Aritra Samanta: UCR CS, 2022-Current (Co-author; Current Ph.D. student at UCR)
- Yifan Yu: UCR CE, 2022-Current (Project; Current Ph.D. student at UCR)
- Ao Ding: SUSTech CSE, 2019–2020 (Co-author; Current master student at SUSTech)
- Zelin Wang: SUSTech CSE, 2019–2020 (Project; Current master student at USTC)
- Shuqing Li: SUSTech CSE, 2019–2020 (Project; Current Ph.D. student at CUHK)

SKILLS

- Programming Languages:: C, C++, Python, Rust.
- Machine Learning Frameworks:: Pytorch, Tensorflow, Caffe, Google JAX.
- Robotic Frameworks:: ROS, ROS 2, Autoware.
- Embedded Platforms:: NVIDIA Jetson Toolkit, Raspberry Pi, Google Coral Edge TPU.
- Adversarial Machine Learning: Energy attack, Transferable attack.

Reference

- Cong Liu: Associate Professor of Electrical and Computer Engineering, University of California, Riverside (UCR).
- Yuqun Zhang: Assistant Professor of Computer Science, Southern University of Science and Technology (SUSTech).
- Wei Yang: Associate Professor of Computer Science, University of Texas at Dallas (UTD).
- Shouhong Ding: Senior Researcher of Youtu Lab, Tencent.