

LEI GAO

213-255-8040 ◇ leig@usc.edu

EDUCATION

University of Southern California

Ph.D. in Electrical Engineering

Advisor: Murali Annavaram

August 2022 - Present

Los Angeles, California, USA

University of Southern California

M.S. in Electrical Engineering

January 2020 - May 2022

Los Angeles, California, USA

University of California, Santa Barbara

B.S. in Electrical Engineering

September 2019 - March 2019

Santa Barbara, California, USA

WORK EXPERIENCE

FedML Inc

Applied Researcher Internship

May 2022 - July 2022

California, USA

- Participated in the development of FedML library focusing on the feature of on-device training engine.

OmniVision Technologies Inc

SoC Design Engineer

July 2021 - April 2022

California, USA

- Participated in digital design and verification of MIPI CSI-2 IP core for CMOS image sensor.

Chipltech Technologies Ltd

ML ASIC Software Engineer Internship

September 2019 - December 2019

Shenzhen, China

- Evaluated and improved the performance of an ML ASIC microarchitecture simulator.

PUBLICATIONS

1. Tuo Zhang, **Lei Gao**, Sunwoo Lee, Mi Zhang, Chaoyang He, Salman Avestimehr “TimelyFL: Heterogeneity-aware Asynchronous Federated Learning with Adaptive Partial Training” CVPR 2023 Federated Learning for CV workshop.
2. Tuo Zhang, **Lei Gao**, Chaoyang He, Mi Zhang, Bhaskar Krishnamachari, Salman Avestimehr “Federated Learning for Internet of Things: Applications, Challenges, and Opportunities” IEEE Internet of Things Magazine.
3. Tuo Zhang, Chaoyang He, Tianhao Ma, **Lei Gao**, Mark Ma, Salman Avestimehr “Federated Learning for Internet of Things: A Federated Learning Framework for On-device Anomaly Data Detection” ACM SenSys 2021 AIChallengeIoT Workshop.
4. Feng Yun, Yunkun Lin, Lou Yunfei, **Lei Gao**, Vaibhav Gera, Boxuan Li, Vennela Chowdary Nekkanti, Aditya Rajendra Pharande, Kunal Sheth, Meghana Thommondru, Guizhong Ye, Sandeep Gupta “Fault-coverage Maximizing March Tests for Memory Testing” 2022 IEEE International Test Conference.

PATENT

1. Xiaoming Chuang, Yifan YangGong, Hanxun Zheng, **Lei Gao**, Juzhe Zhong “Data processing method, device, chip and computer readable storage medium” China Patent CN111814983A, October 23, 2020.

AWARDS

1. USC Ph.D. Annenberg Fellowship for 2022-2023
2. UCSB College of Engineering Honors Program Graduation Scholar