ZEMING ZHUANG

EDUCATION

Shanghaitech University

M.S. in Information and Communication Engineering Overall GPA: 3.82 out of 4.0 Convex Optimization(A), Mechatronics(A), Wireless Communication(A-), Machine Learning(A-)

Shanghaitech University

B.Eng. in Electronic Information Engineering and Minor in Finance Signals and Systems(A), Operating Systems I(A-), Introduction to Control(A-) Investment and Financial Market(A+), International Finance(A), Principles of Accounting(A)

RESEARCH EXPERIENCE

iData Lab

Instructor: Prof. Yuanming Shi and co-advised by Prof. Dingzhu Wen

• I joined iData Lab in 2022 and at present I am focusing on the research of Optimization and Machine Learning methods for resource allocation and transceiver design in new wireless communication networks such as Integrated Sensing and Communication and Edge Computing.

Shanghai Institute of Fog Computing Technology (SHIFT) Instructor: Prof. Yang Yang, IEEE Fellow

• I joined SHIFT since my third year of college in 2020, where I started learning about fog computing and edge learning. Reading publications and working with lab mates let me have a solid grasp on knowledge of Fog Computing and MEC.

PUBLICATIONS

[1] Z. Zhuang, D. Wen, Y. Shi, G. Zhu, S. Wu and D. Niyato, "Integrated Sensing-Communication-Computation for Over-the-Air Edge AI Inference," in IEEE Trans. Wireless Commun., vol. 23, no. 4, pp. 3205-3220, April 2024, doi: 10.1109/TWC.2023.3306465.

[2] Z. Zhuang, D. Wen and Y. Shi, "Decentralized Over-the-Air Computation for Edge AI Inference with Integrated Sensing and Communication," 2023 IEEE Globecom, Kuala Lumpur, Malaysia, 2023, pp. 4644-4649, doi: 10.1109/GLOBECOM54140.2023.10437432.

[3] J. Guo, K. Li, H. Li, W. Liu, **Z. Zhuang**, Y. Zhou and Y. Yang, "Markov State Transition Modeling in Complex High-Dimensional State Space Based on Fuzzy Integral," 2022 IEEE Globecom Workshops, Rio de Janeiro, Brazil, 2022, pp. 916-921, doi: 10.1109/GCWkshps56602.2022.10008684.

PROJECT AND VOLUNTEER

A surveillance APP for epidemic

• At the beginning of COVID-19 outbreak, my friends and I made an APP to collect and report resident's daily activity and physical conditions. Our APP has come into service for communities in Zhejiang and Sichuan during Feb. and March 2020.

Shanghai International Marathon in 2018 & 2022

Nov. 2018 & 2022

Feb. 2020

Sept. 2019 - March 2022

Sept. 2017 - July 2021

Sept. 2021 - Expected July 2024

March 2022 - Expected July 2024

 \cdot I am always keen on joining social activities and helping others. I have been a volunteer for Shanghai Marathon Race and my duty was to guide runners after the finish line to supplement area and response to other potential need.

TEACHING ASSISTANT EXPERIENCE

Tools

Convex Optimization		Fall 2023
Introduction to Information Science and Technology		Fall 2021
HONORS		
ShanghaiTech Merit Student (Top 10%)		Nov. 2023
TECHNICAL STRENGTH		
Languages	Chinese (Native), English (IELTS 7.5), Ja	apanese (Conversational)
Programming Languages	Python, $C/C++$, MATLAB	· · · · · ·

Git, LATEX, PyTorch, Pandas, CVX