

Liu Yuchen

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PROFILE

- Major in Information and Communication Engineering, Tokyo Tech
- TOELF score: 97/120(R:28 L:27 S:21 W:21)
- JLPT N2 score: 166/180, JLPT N1 score: 143/180
- AWS Certificated Cloud Practitioner

EDUCATION

Huazhong University of Science and Technology GPA: 3.69/4.0
Bachelor of Engineering (Major) 2016.9-2020.6
School of Electronic Information and Communication Engineering
Major in Electronics and Information Engineering
Subdivision in Digital Signal Processing

Huazhong University of Science and Technology GPA: 3.82/4.0
Bachelor of Arts (Minor) 2017.9-2020.6
School of Foreigner Language
Major in Japanese

Tokyo Institute of Technology
Master of Engineering 2020.9-Now
School of Engineering
Department of Information and Communication Engineering
Fukawa Laboratory (Next Generation Wireless Communication System)

EXPERIENCE

My research is focused on applying Deep Learning/Machine Learning to small-cell mobile communication system to optimize parameters like beamforming vector selection, transmission power or any other possible factors which is potentially affect overall system performance due to inter-cell interference.

In present stage, we used multi-agent Deep-Q-Learning (DQL) scheme to realize fair performance but fast integrated solution for transmission power and 3D-beamforming vector

joint optimization. The completely multi-agent training method and more optimization parameter will be discussed in the future research.

EXPERIENCE

July.2019-Sep.2019

Summer Research Program in National University of Singapore (NUS)

Instructor: Professor Andrew Lim

In this summer research program, I study related knowledge of computer vision and complete a human motion capture system, using single camera to realize a fair performance (compare to SOTA). And win the final prize in AI contest in this summer camp.

Sep.2019-Jan.2020

Research assistant in Nation Chiao Tung University (NCTU), MBWC lab

Instructor: Professor Sau-Hsuan Wu

I study as a research assistant in NCTU MBWC lab during exchange semester in NCTU. I finish a research program related to indoor location system based on channel state information. We adopted CNN in

Jun.2020-Sep.2020

Internship as Embedded Software Engineer in TP-LINK

Affiliate: Research Center for Business Partner (Oversea)

TP-LINK is a world leading network device company. I worked in Oversea Business Research Center to develop router system for business partners.

SKILL

- C/C++: Embedded Software Development
- Python: Machine Learning
- Linux
- Golang: Web development (Beego, Gin)
- Wireless Local Area Network: 802.11 related research and development
- Mobile Communication System: LTE, 5G system related knowledge