ZIJIAN LUO

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EDUCATION

National University of Singapore   *Jan. 2021 - Jan. 2022*
Master of Science(Electrical Engineering)
Department of Electrical and Computer Engineering

University of Electronic Science and Technology of China   *Sept. 2016 - June 2020*
Bachelor of Engineering(Internet of Things Engineering)   GPA: 3.68/4.00
School of Information and Communication Engineering

HONORS & AWARDS

Scholarship for Outstanding Graduated Students, UESTC   *June. 2020*

Excellent Concluding Report, National Students' Innovation and Entrepreneurship Project

Sept. 2018

Meritorious Winner,US Interdisciplinary Contest in Modeling (ICM)   *Mar. 2018*

Third Prize Award of Mathematical Modeling Contest, UESTC   *June 2017*

Excellent Concluding Report,From Project to Professional Project, UESTC   *April 2017*

PROFESSIONAL EXPERIENCE

Lecturer, Jiujiang Univerisity   Sept. 2022 - May. 2023
- Taught Principles of Communications

Python Course Intern, SimpleCloud Tech   Jan. 2019 - Apr. 2019
- Designed Python advanced algorithm course in the online education platform Shiyanlou
- Currently there are 5889 students have studied my courses

Winter School, University of Oxford   Jan. 2017 - Feb. 2017
- Oxford Study Program, Merton College

RESEARCH EXPERIENCE

Jellyfish network in AWS   Oct. 2021 - Nov 2021
- Advisor: Ben LEONG(NUS)
- Designed a server network construction solution for the campus data center of NUS Computing Department, which is based on the structural characteristics of the Jellyfish network.
- Completed the simulation of the network structure of the order of k=12 on AWS (the network service of instant communication with 2304 servers) to achieve high robustness.
- Implemented the kernel compilation of MPTCP protocol on Ubuntu servers, which improves the communication efficiency and throughput than the single TCP protocol.

3D Human Pose Estimation Algorithm   Oct. 2019 - June 2020

- Thesis Supervisor: Liaoyuan Zeng(UESTC)
- Designed this estimation algorithm that adopts two-stage 3D human pose estimation method, and the training neural network model is based on hourglass network structure.
- Based on the principle of camera imaging, combined with the single hole imaging model, the 3D coordinate of human posture is constrained geometrically.
- Trained the model in MPII dataset and finally achieved less average joint error(56mm) than the stacked hourglass network at the same type.

WeChat Mini Program of UESTC Campus Map   Feb. 2019 - July 2019

- Advisor: Ye Pan(UESTC)
- This product is serviced for all our students and teachers in UESTC.
- As the team leader, my duty is to coordinate the team with the work allocation and process track. UESTC Campus Map finally put in use and get some praise.
- Designed the Django framework in its database and final declaration procedure.

QPSK Full Duplex Communications System   Sept. 2018 – Nov. 2018

- Advisor: Zhizhong Fu(UESTC) and Xiaofeng Li(UESTC)
- Based on FPGA platform,combined with QPSK principle,this communication system supports both compressed file and full duplex voice transmission.
- Set up communication simulation leveraging MatLab on FPGA platform and actual link, including receiving and transmitting antenna.

RELEVANT COURSES

- Master Degree(NUS)

  Completed Courses

Stochstic Process(4.5/5.0)	Information Theory and its Application
Neural Networks (4.0/5.0)	Pattern Recognition
Computer Network(4.0/5.0)	Advanced Computer Network
Convex Optimization for Electrical Engineering(4.0/5.0)	Multiprocessor System
Real time System (4.0/5.0)	Selected Topics in Industrial Control(4.0/5.0)

- Bachelor Degree(UESTC)

Mathematics Related Courses	**Professional Core Courses**
Calculus (4.0/4.0)	Principle of Communication (3.9/4.0)
Linear Algebra and Space Analytic Geometry (4.0/4.0)	Signals and System (4.0/4.0)
Probability and Statistics (4.0/4.0)	Blockchain Technology (4.0/4.0)
	Network Security (4.0/4.0)
	Information Security (4.0/4.0)

MISCELLANEOUS

Computer Languages	C/C++, Python, MatLab, Golang, Latex
Software & Framework	Pytorch, Pandas, Numpy, Django
OS	Linux, Windows