ZIJIAN LUO

Website: sites.google.com/view/luozijian
Phone:(+65) 98912483
Email: luozijian@u.nus.edu

EDUCATION

National University of Singapore *Jan 2021 - Present*
Master of Science(Electrical Engineering) GPA: 4.00/5.00
Department of Electrical and Computer Engineering

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

HONORS & AWARDS

Scholarship for Outstanding Students, UESTC *Mar 2017*

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

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

Excellent Concluding Report, National Students' Innovation and Entrepreneurship Project *Sept 2018*

Scholarship for Outstanding Students, UESTC *Mar 2019*

PROFESSIONAL EXPERIENCE

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

Summer School, National University of Singapore Jun 2018 - Aug 2018

- Entrepreneurship and Innovation, ISPACE
- Innovation Management Program, Faculty of Engineering

RESEARCH EXPERIENCE

3D Human Pose Estimation Algorithm Oct 2019 - Jun 2020

- Thesis Supervisor: Zeng Liaoyuan(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 - Jul 2019

- This product is serviced for all our students and teachers. We add some special functions that users can make comment and recommendations on the base interface from Tencent Map. UESTC Campus Map finally put in use and get some praise.
- As the team leader, my duty is to coordinate the team with the work allocation and process track.
- Designed the Django framework in its database and final declaration procedure.

Smart Home System Apr 2019 – Jun 2019

- Based on ZigBee communication protocol stack,the system achieve smart home function in Intelligent lighting control pane,such as automatic curtain function and three way lighting switch control function.
- Designed the wireless networking function and the gateway module.
- Designed the process algorithm of temperature control switch.

QPSK Full Duplex Communications System Sep 2018 – Nov 2018

- Advisor: Fu Zhizhong(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.

"Health Assistant" APP Jul 2018 – Nov 2018

- Advisor: Wu Huijuan(UESTC)
- A derivative APP that tracks and analyzes user's steps which is obtained from plug-in WeRun API and intelligently pushes health tips
- Designed the data analysis system and evaluated the patterns of user's steps
- Established the evaluation indices system considering user's diet and physique

RELEVANT COURSES

- Master Degree(NUS)

Completed Courses
Stochstic Process
Neural Networks
Computer Network
Optimization for Electrical Engineering
Real time System

Ongoing Courses
Information Theory and its Application
Pattern Recognition
Advanced Computer Network
Multiprocessor System
Selected Topics in Industrial Control

- Bachelor Degree(UESTC)

Mathematics Related Courses
Calculus (4.0/4.0)
Linear Algebra and Space Analytic Geometry (4.0/4.0)
Probability and Statistics (4.0/4.0)

Professional Core Courses
Principle of Communication (3.9/4.0)
Signals and System (4.0/4.0)
Information Theory (3.7/4.0)
5G Wireless Access Technology (4.0/4.0)
Information Security (4.0/4.0)

MISCELLANEOUS

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