

HANZHI YANG

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EDUCATION

Northwestern University

M.S. in Computer Engineering(3.9/4.0)

Sept. 2018 - Dec. 2019 (expected)

Southeast University

B.Eng. in Information Engineering

Aug. 2014 - Jun. 2018

SKILLS

Computer Languages

Java, C/C++, JavaScript, C#, Python

Tools and Framework

Git, AWS EC2, React, Bootstrap, express, MongoDB, MySQL, Node.js
MSSQL, MATLAB

Operating System

Windows, Linux, Mac.

WORK EXPERIENCE

HUAWEI TECHNOLOGY CO., LTD

Network Engineer Intern

Jul 2017 - Sept 2017

Nanjing, China

- Worked on **QoS**, particularly on **priority mapping, buffer queue, and flow control**.
- Located 1 critical problem leading to packet loss when router dealt with 10M burst traffic over bandwidth. Addressed the problem and increased burst traffic capacity from 4MB to 71MB by modifying the wrong register bits in the switch.
- Solved 1 problem caused by adding DSCP priority mapping under vlan-view. Addressed the problem by removing vlan-view configuration and deploying DSCP to layer 3.
- Wrote 4 summary documents about switchers test for new hires.

PROJECTS

Early-bird Homepage

Aug 2018 - Oct 2018

- Built a group oriented website, including a homepage, profile, and ranking, implemented by **ReactJS** and **reactstrap**.
- Implemented basic functions including sign up, log in, comment, and blog post, realized by using **MongoDB** to store data, **express** to deal with HTTP request and response and authentication.

Parallel Computing

Nov 2017 - Jun 2018

- Implemented MMSE filter parallel computing with multiple threads distribution in 5G lab platform, realized by data structures and library of **DPDK**.
- Distributed 64 cores into 4 kinds of cores to deliver received data packets, deliver processed data packets and processing data packets, and distribute all 3 tasks respectively, implemented with mempool, mbuf and ring data structures and RX/TX functions in DPDK library.
- Utilized 2 same size memory spaces and swapped them to avoid real-time computation.
- Improved time performance from 1.60ms to 0.148ms.

A Car with Wireless Control

Dec 2015 - May 2016

- Implemented control of the car with a phone, real-time video transmission from cars camera to phone.
- Built an Android APP to send instructions to MCU, implemented by utilizing **ser2net** and TTL port transmission, and receive real-time video from car's camera, implemented by utilizing **mjpeg-stream** package.
- Awarded as one of the annual best projects in school.