

Guoze(Terry) Tang

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EDUCATION

Clemson University - *Master of Computer Science*

Clemson, SC **Intended Grad: May. 2019**

University of Science and Technology of China - *Master of Software Engineering; Rank:1/47*

China **Mar. 2017**

Yunnan University - *Bachelor of Electronic and Information Engineering*

China **Jul. 2014**

PROGRAMMING SKILLS

- **Programming Language:** C(4yrs), C++(2yrs), Java, Python, Shell Scripting, Flex, Bison, Bincpac, Assembly, MySQL, JSON, MATLAB
- **Working Environment/Tools:** Linux(5yrs), GCC, Makefile, Git, gdb, Embedded Linux, ucos, VxWork, ARM STM32, ARM9, MVC Design Pattern, Tkinter, ARM, Click, Bro, VS Code, Keil, Vim

EXPERIENCE

The School of Computing at Clemson University

May. 2018 - Present

Research Assistant

Clemson, CA

- **Research Assistant - Network Security:** Research on Virtualization of Network Intrusion Detection Systems for network protocol parser. Implemented the Network Protocol parses for DNS, HTTP protocols by Bincpac language, Bro system, and Click system.

DJI Technology

Apr. - Nov. 2016

Embedded Software Development Intern

Shenzhen, China

- **Sensor Driven Development:** Developed more than 10 sensor devices using C in the ucos system for FJ project in DJI and the validated barometer driver code work well on MAVIC UAV which is a famous unmanned aerial vehicles produce in the world.
- **Data Analysis:** Used Statistical method to analyze sensors data by Matlab to make a decision about which is the better sensor for the produce.
- **Dev Environment:** Analytics environment based on Matlab and Shell Scripting on Ubuntu Linux.

BJ Yunxi Technology

Jun. 2015 - Apr. 2016

Embedded Software Development Intern

Guangzhou, China

- **Embedded System:** Developed ARM part of the master control module and developed VoIP based on Asterisk. Realized online upgrade in the master module and the SLP Protocol Analysis module.
- **Software Development:** Applied technology and tools: Keil developertools, Mysql database, VxWork driver development, built VoIP server based on Asterisk, built SVN server.

PROJECTS

Network Protocol Parser *C++, Bincpac language, Click System, Bro System*

May. - Sep. 2018

- Design the RIP, DNS, HTTP, FTP, SSH network protocol parser by C++ and Bincpac language.
- Implemented these network protocol parser based on the Bincpac and Open Pcre lib. As a result, it is easily integrated into the other project. For instance, I had integrated it into Bro and Click system in this project.

Paper Track System *Python, Tkinter, MVC Design Pattern*

May. - Aug. 2018

- Designed the GUI of Paper tracking system by Tkinter. Realized the paper manager code.
- Applied technology: Tkinter, Python3.5, MVC Design Pattern.

VoIP Audio Remote Control System Based on SIP Protocol *C, SIP, RTP, VoIP, ARC*

Sep. 2015 - Jun. 2016

- Designed and implemented a VoIP audio remote control voice terminal software based on OMAP-L138 ARM9 chip.
- Implements VoIP audio control application, Main control module with logic control, hardware initialization, reset examination and SIP user agency initialization.
- Implemented SIP user agency module which includes three things: SIP communication module, RTP transmission module and WEB configuration module.
- Implemented SIP protocol stack by oSIP open lib, RTP protocol stack by JRTPLib, and WEB server by GoAhead.
- Test result: VoIP communication system delay time is less than 120ms, and system language communication quality MOS is 4.8.

2015 RoboMaster Robot Competition *C, ARM, UART, I2C, SPI*

Sep. 2014 - Jun. 2015

- Finished STM32F4 communication with a remote pan and adjustment of PID parameters.
- Worked out main Control Board receives remote control data error after adding the door dog.

An Encrypted File system Based on Linux *C++, QT, Shell Scripting, eCryptfs*

2014 - 2015

- Designed team work plan and the overall framework of the project.
- Realized eCryptfs cryptographic file system implementation mechanism, designed UI Interface based on QT, dealt with root permissions file access vulnerability.
- Applied technology: QT Development, Linux file system, GCC, Makefile and gdb.
- Finished perfectly and got second prize of USTC.

HONORS AND AWARDS

- **The Excellent graduate in USTC and Anhui province 2017**
- **National master scholarship (TOP 2%) 2015**
- **Software Design competition: Second prize (USTC)**
- **Robomasters robot competition: First prize (East China), Second prize(China) 2015**