Yuxin Zhang

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EDUCATION

University at Buffalo, The State University of New York (Aug. 2015 - Dec. 2016)
Master of Science, Electrical Engineering, Concentration in Communication GPA: 3.67/4.0

Harbin Institute of Technology at Weihai (Sep. 2011 – Jul. 2015)
Bachelor of Science, Optical Information Technology GPA: 3.6/4.0

WORK EXPERIENCE

Research Assistance, Optical Lab, Harbin Institute of Technology at WeiHai Oct.2014 - Jul.2015

- Joined Project Optical-Fiber Taper Machine used SCM to build embedded control system to connect 4 main parts with 16 I/O ports and programming inner logic with C to convert 20 parameters to shape Optical fiber
- Based on more than 100 test to increase output precise to 0.1mm and 0.01 second
- This machine has the same performance as a lab used machine with 10 000 RMB

Teaching Assistance, Harbin Institute of Technology at Weihai Sep.2013 - Jan.2015

- Assisted professors in teaching

C Language Program Design	230 students	Principles of Computer Structures	190 students
Fundamentals of Mono-Chip Computers	75 students	Laser Principles and Applications	75 students

SKILLS

Language: Java Script, HTML5, CSS3, SQL, JAVA, C, C++, Python, C#, MATLAB

Tools: Java EE, Eclipse, Spring, AWS, Node.js, SOAP, .NET, GIT, Shell, GitHub, BitBucket, Visual Studio, Dream Weaver, Unity5, Wire Shark

PROGRAMMING PROJECTS

Multiplayer Game - Master Labyrinth, Team Project, University at Buffalo, Team Leader Spring 2016

- Followed OOD to use 4 layered structures to organize 8 kinds, in total 101 multi-connected components displayed with playable GUI based on Java SWING within 5000 lines of concise codes and detailed Java Doc
- Collaborated with 4 team members on BitBucket guided by over 300 Junit Tests
- Rewrote peers' codes to improve scalability and readability by reducing 40% lines, separating 30% of the methods and utilizing better algorithms to improve performance by 35%
- Implemented functions to save running program into backup file and be able to 100% restore to former status

Chatting APP and Network Realization - Based on Command line, University at Buffalo Spring 2016

- Implemented SHELL controlled Command-Line based message exchange application both in server and client side using TCP and UDP protocol in C++ with 10 network tests and 130 function tests
- Boosted routing speed by 30% by maintaining forwarding table of each router and implementing path-finding scenario based on communication quality, server load and multi-timer to update table
- Used Wire Shark to listen network connection and maintained a Database to store statistics of user status, server load, send messages and transferred files, etc.

Video Compress Strategy realization, University at Buffalo Spring 2016

- Used Windows command line to compress video among 6 strategies to decrease file size by 20% - 40%
- Implemented analysis algorithms to compare frame complexity and compression cost to choose the best strategy
- Based on simulation test to build recover point based on channel condition and frame quality