Yuxin Zhang

http://yuxinzh.site | tayzyx2017@gmail.com | (716)-907-5675
https://github.com/taylorzhangyx | https://www.linkedin.com/in/yuxin-zhang-5248b7b5

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

SKILLS

Node.js, Express, EJS, AJAX, MongoDB, NoSQL, AWS, ASP.NET, MVC, Microsoft SQL, Spring, JQueue, Objective C, C++, Java EE, HTML, CSS, SQL, Git, GitHub, BitBucket, Eclipse, Visual Studio.

PROGRAMMING PROJECTS

Web Shopping Application, *Node.js*, http://yuxinzh.site/shop Apr. 2017

- MongoDB, Expressjs, Node.js based web application runs on AWS EC2
- Implemented shopping cart with Add-item, Remove-Item, Display-cart with MongoDB and Session, Check-out with Stripe API to work with real Bank Account. This works for both anonymous customer and registered.
- Connected to MongoDB to manage user info, adding new product, edit product details and purchase data
- Used passport and bcryptjs to enable register and page authentication
- Designed routing table for page retrieve and switch, use csurf to protect server from attack

Chatting APP and Network Routing - Based on Linux, University at Buffalo Spring 2016

- https://github.com/taylorzhangyx/Chatting-APP-and-Network-Routing
- Deployed Command-Line based message and file exchange application on one main server and several clients using sockets to build TCP and UDP connection in C++
- Utilize Distance Vector Protocol with topology table to boost routing speed by 30%
- Maintaining fault-tolerant system using gossip protocol and SWIM to detect status and manage server connection
- 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.

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
- 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%
- Collaborated with 4 team members on BitBucket guided by over 300 Junit Tests
- Implemented functions to save running program into backup file and be able to 100% restore to former status

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 algorithm with C to convert 20 parameters to shape Optical fiber
- 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