

Rongyi Zhang

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WEBSITES

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EDUCATION

Rensselaer Polytechnic Institute (RPI), Troy, NY

Junior second semester

Expected Graduation Date: December 2020

Bachelor of Science in Computer Science and Information Technology & Web Science, Dual Degree

GPA: 4.0/4.0

SKILLS

- Python, C, C++ , Java, C#, swift, HTML, CSS, JavaScript, R, MATLAB, shell scripting, Markdown, docker.
- Networking programming with TCP/UDP, multithreaded programming, multi-process programming.
- Good understanding of Linux command lines, git, unit testing and Object-Oriented design principles.

RELEVANT

COURSEWORK Distributed Systems and Algorithms

Fall 2019

- Studying different models, abstractions and key algorithms for distributed systems.

Data structures

- Gained the ability to analyze, select, implement and use the most appropriate data structures.

Application Programming Using Java

- Utilized Java SE language features and major JDK libraries to create text based and GUI applications.
- Understood high performance computing features and created robust multithreaded applications.

Introduction to Algorithms

- Understood the correctness of, and analyze the running times of, different algorithms.
- Made intelligent decisions about alternative data structures and algorithms for practical problems.

Other Courses Principles of Software, Embedded Control, Open Source Software, Operating Systems, etc.

PROJECT

EXPERIENCE

Battle of Tanks

- Designed basic structure, fundamental classes and interfaces for this project, based on the MVC model.
- Managed the entire project and instructed other teammates on their work.
- Developed the online multiplayer mode with a dedicated server, utilizing TCP, serialization and multithreading.
- Implemented GUI for this game, with Swing and LWJGL as GUI tools.
- Guarantees zero lagging in multiplayer mode if connection speed with server reaches 670 B/s.

Campus Map

- Constructed a generic graph data structure and corresponding interface without any representation exposure.
- Implemented algorithms like BFS and Dijkstra's algorithm to find the shortest path between different nodes.
- Integrated a user-interactive GUI which can show the closest path between two selected campus locations.

iPhone World

- Completed class/interface design while strictly following the SOLID principle and other OOP principles.
- Invented an efficient DP algorithm to help test the quality of cell phone protection cases.

Farmer Market

- Built a website which displays information about different farmer markets in the U.S.
- Enabled the website to support searching, log in, and leaving reviews for a farmer market.
- Assembled Java servlet, JDBC, Tomcat, html, Mysql and connector/j to realize expected functions.

LEADERSHIP

- Project leader of Battle of Tanks August 2019 - Current
- Captain of the robot team in Shijiazhuang NO.2 middle school September 2016 - June 2017

HONORS & REWARDS

- Exceptional performance in CSCI-4210 Operating Systems
- Exceptional performance in CSCI-2500 Computer Organization