

Zailin Yuan

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EDUCATION

M.S., Computer Science	Jan.2020-Dec.2020
University of Texas at Dallas (UTD), TX	GPA: 3.52/4.00
M.S., Chemical Engineering	2016-2018
University of Southern California (USC), Los Angeles, CA	GPA: 3.28/4.00

SKILLS

- Coding with: Java, JavaScript, jQuery, HTML, CSS, C/C++, Python3, Scala, R
- Databases & Operating System: MySQL, MongoDB, Linux
- Frameworks: NodeJS (Sails.JS), ReactJS

INTERNSHIP

Alchemy, a FinTech Infrastructure Company	Feb.2020-Now
Web developing	
<ul style="list-style-type: none">• Multitask on developing several website projects to make sure all websites work properly. Modify them as project manager demands. Working with third party web services sometimes. Managing projects using Git.• Develop front end web pages including architecture, style, functions and user interactions to realize the business flow as demand using HTML, CSS, JavaScript, jQuery, Nunjucks template and plugins/packages.• Program on back end applications and controllers to processing user requests. MongoDB CRUD and pass data to render web page template for response using Sails.js framework on Node JS platform.	

PROJECTS & EXPERIENCE

Stock Trading Website (JavaScript)	Nov.2019
Group work development of a website for search/buy/sell stocks using ReactJS / NodeJS (KOA)	
<ul style="list-style-type: none">• Allow user to register, login, log out, add bank accounts and transfer money on the website. Allow User to search and go through more than 100 stocks with pagination. Stocks can be buy / sell one-time or by schedule. Allow users to see stock charts and check stock details by using E-chart template.• Developed asynchronous webservice called when users buy and sell stocks by using request queue. OAuth SSO are realized and users can login through GitHub. Communication channels between server, client and web service server are encrypted by TLS.• Use MySQL as the database for the website.	
URL: https://github.com/UTD-Silvermont	
Back-End Server (Java)	Aug.2019
Develop a server response to multi-requests by clients by multi-threading with Java .	
<ul style="list-style-type: none">• Implemented a Thread Pool with fixed 10 threads to treat customer requests.• Designed a requests queue of fixed size in singleton mode.• Realized communication between threads in thread pool by monitor. Thread safety of multi-thread processing are guaranteed.• Optimized the code so that the multi-thread process gains a better performance.	
URL: https://github.com/ZailinYuan/Thread-Pool.git	
Database Design (Java)	Jun.2019
Implement SQLite with Java	
<ul style="list-style-type: none">• The database must be used by command line. It contains functions like insert, query, update, delete with or without selection condition.• Meta-data are contained in the database file systems.• The database is based on file system of Bit string I/O. A file system composed of pages of size 512B are realized. All operations (insert, query, update and delete) are based on bit string operation on database files.• Index file system based on B+ tree is also developed for high performance of query records in database.	
Walking Labyrinth Game (Java)	Jan.2018
Computer find the path of any maze	
<ul style="list-style-type: none">• Implemented a program to find maze path instead of human. Load maze from text files.• Found path from the start location to the exit with DFS and backtracking algorithm.• Developed an interface with JFrame and JComponent to display maze path.	
URL: https://github.com/ZailinYuan/MazePathSearcher.git	