

Runbo(Chuck) Zhao

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EDUCATION

SYRACUSE UNIVERSITY, USA

MSC., COMPUTER AND INFORMATION
SCIENCE

Grad. Dec 2018 | Syracuse, NY
GPA: 3.9/4.0

XIDIAN UNIVERSITY, CHINA

BENG., MATHEMATICS AND APPLIED
MATHEMATICS

Grad. June 2016 | Xi'an, China

LINKS

[Github:](#) // Runbo94

[LinkedIn:](#) // Runbo94

COURSEWORK

Internet Programming
Object Oriented Programming C++
Software Engineering
Operating System
Mathematics Basis for Computing
Design and Analysis of Algorithm
Computer Architecture
Introduction to Database Management
System
Randomized Algorithms: Think and Code
Structured Programming and Formal
method

SKILLS

PROGRAMMING

Over 5000 lines:

Java • JavaScript • TypeScript • Matlab

Over 1000 lines:

CSS • HTML • SQL • \LaTeX • C++

C • Haskell

Familiar:

NoSQL

FRAMEWORK

Angular • React • Express.js

Hapi.js

DATABASE

MongoDB

Firebase Real-time database

OTHER TOOLS

Git • npm • Heroku • PostMan

EXPERIENCE

SYRACUSE UNIVERSITY(E&CS) | UI DEVELOPER (UNPAID INTERN)

February 2019 - Now

- Built the **responsive** Navbar & Modals with Bulma by using **HTML5, CSS3 & JSX**.
- Designed the core components with CRUD operations and RESTful routing with the use of react-router-dom.
- Developed the Container components to subscribe to the Redux state.
- Connected React with Redux by using the Provider of **react-redux** and created the single store.
- Created actions with Action Creator and applied redux-thunk middleware to the store to handle Async actions.
- Developed Reducer functions to handle the state data changes and used axios to make HTTP request to persist the data in the database.
- Implemented RWD such as page layouts, menu, navigation buttons, icons and drop-down lists.
- Implemented the server-side with Node.js, Express.js and connected it with MongoDB by using mongoose.
- Used connect, mapStateToProps and mapDispatchToProps to connect the application with the store.
- Created database Schema with mongoose based on the data flow requirements and features.
- Performed Unit testing for some modules and features with Jest in the development process.
- Implemented **RESTful Services** with HTTP methods like GET, POST, PUT & DELETE.
- Worked on the document-oriented NoSQL database program - MongoDB for consistent data storing by using JSON-like documents with Database schema.

PROJECT

WWW.GITGROUP2018.COM | A WEB BASED SOFTWARE DEVELOPMENT MANAGEMENT SYSTEM

September 2018 - Now

- Seamless integration with GitHub keeps all of your GitHub Issue data in sync across both platforms in real time.
- Access the GitHub personal data via GitHub REST API v3. Authorize users through GitHub OAuth APP three steps.
- Drag and drop the card among different columns which represent different stage of the development process. Implement beautiful, natural movement of draggable and droppable items. Draw a variety of Agile charts using ReCharts.
- Use highly-productive Typescript to build Node server.
- **Tools:** HTML5, CSS3, Bulma, **React**, TypeScript, ts-node, MLab, Heroku

NACHOS OPERATING SYSTEM | NOT ANOTHER COMPLETELY HEURISTIC OPERATING SYSTEM

August 2018 - December 2018

- Added multi-threading capabilities to Nachos.
- Created Process functions and Thread Fork functions like FORK, TERMINATE & JOIN.
- Implemented several system call routines for user programs and round-robin scheduling like FORK_POS, WAIT_POS, EXIT_POS.
- Implemented Round-robin scheduling. Round-robin scheduling gives each process a fix time slice to run.
- **Tools:** C++, Vscode, Linux

WWW.JAJANG.CLOUD | A CLOUD-BASED RESTAURANT MANAGEMENT PLATEFORM SERVICE, DESIGNED FOR THE SMALL AND MEDIUM RESTAURANTS.

October 2017 – April 2018

- Implement the table status monitor function by the Firebase realtime database. The RxJs makes it possible to do real-time, bidirectional and event-based communication between managers and customers.
- Achieve basic E-commerce functions, such as: authentication and authorization, product lists, shopping cart, etc.(seeRunbo94/JaJang-report). Also, to make JaJang more functional,some third-part modules is imported in JaJang such as: e-ngx-print, ngx-qrcode, neu-charts.
- Beautiful style of pages including some animation and fashion web component like card, carousel, modal. Also ng-bootstrap is also well designed for **responsive pages**, which is suitable for using JaJang on both PC and mobile platform.
- Use **SVG** to design **pixel-perfect** menu maker.
- **Tools:** HTML5, CSS3, Bootstrap, **SVG**, TypeScript, Angular5, Firebase

WWW.RENMOVIE123.COM | AN ONLINE MOVIE RATING AND RENTING SERVICE

May 2018 – September 2018

- Full-stack developed using React + Express + MongoDB model. deployed by Heroku.
- Build the frontend by React with some key components(**OOP**), including functional and well designed List component, implementing pagination, filtering, and sorting, Form component implementing submission and validation. etc.
- Using Node.js to design the restful API backend and do fully unit test and integration test by Jest.
- **Tools:** HTML5, CSS3, Bootstrap, **JavaScript**, **React**, **NodeJs**, **ExpressJs**, MongoDB

RESEARCH

PAGERANK BASED ANALYSIS OF NETWORK NODE INFLUENCE

July 2014 – September 2014

- Treat edge weight as a new input and got improved PageRank algorithm, extended the original PageRank iteration formula from one dimension to multi dimension.
- Take Erdos scholar network and Chinese social networks as examples and verified the reliability of the algorithm.