

Andrew Liu

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EDUCATION

University of North Carolina at Charlotte

Masters of Science, Computer Science

May, 2020

Charlotte, NC

- GPA: 3.72
- Chancellor's List: Fall 2018

University of North Carolina at Charlotte

Bachelor of Science, Computer Science

May, 2019

Charlotte, NC

- GPA: 3.65
- Dean's List: Fall 2016 – Spring 2017
- Chancellor's List: Fall 2017 – Fall 2018

TECHNICAL SKILLS

- Languages/Tools: Android, Java, PHP, Python, Flask, SQL, Firebase, HTML, CSS, AngularJS, ReactJS, Vue

WORK EXPERIENCE

University of North Carolina at Charlotte

Graduate Teaching Assistant for Secure Programming and Penetration testing

Jan 2019 – Jun 2020

Charlotte, NC

- Responsible for grading assignments, class participation, and exams.
- Provided students with one-on-one tutoring and regular out of class assistance.
- Class projects are done in **JSP**.

Glycan Therapeutics

Web Developer, Summer Intern

May 2018 – July 2018

Raleigh, NC

- Developed the company website's front-end using **AngularJS**, while the back-end was developed with **PHP**.
- Successfully implemented a login and registration system for the company website which has been a key component to sales and revenue.
- Developed various front-end designs including a sign in page and reworked the homepage.

PROJECTS

8-puzzle solver using A* search

Spring 2020

Developed a Java application that given an 8-puzzle initial state, find the goal state. The algorithm decides an optimal route based on the heuristic values of each future state and selects the one with the lowest value. (**Java**)

Ride America

Fall 2019

Developed an android application that allows users to create & talk in various chatrooms. In these chatrooms, the user is also able to request a ride from other users. After one of the other users offer and the rider accepts, they are both taken to a screen that displays a map and the current location of both users. For the map we used the Google Places API. (**Android/Firebase**)

Brute force String Compression Algorithm

Fall 2019

Developed a brute force algorithm that takes in a linked list of characters and compresses a given string. Example would be with a list [a, b, c] to compress a given string baccbca. The compressed form would take the position of each character in the list and create a list corresponding to those characters [1,0,2,2,1,2,0]. Then to decode, it requires the initial [a,b,c] list for reference. (**Java**)

Crypto Currency Exchange

Spring 2018

Developed a web application in a small team that allows users to buy and sell crypto currencies using play money. User data is stored using MongoDB and crypto currency data is updated in real time using Crypto Compare API. The website also features voice IO using Amazon AWS. (**Meteor Framework/ReactJS**)