

# Alex J Wang

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## EDUCATION

### DUKE UNIVERSITY

BS IN COMPUTER SCIENCE AND  
ECONOMICS

Expected May 2022 | Durham, NC  
Trinity College of Arts and Sciences  
Cum. GPA: 3.86 / 4.0  
Major GPA: 4.0 / 4.0

### OBRA D. TOMPKINS HS

Grad. May 2019 | Katy, TX  
Cum. GPA: 4.84  
Rank: 3 / 800

## SKILLS

### TECHNICAL SKILLS

Proficient with:

Java • Python3 • Javascript (ES6)  
Flask • React • Node.js • Express  
MongoDB • HTML5 • CSS3  
MaterialUI • Bootstrap • Git  
C • Assembly • Agile (Scrum)  
Shell • Jenkins CI/CD • OpenShift  
Docker • npm • Heroku

### SOFT SKILLS

Outstanding:

Verbal communicator and writer  
Leader • Motivator • Team Player

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms  
Computer Architecture  
Multivariable Calculus  
Linear Algebra  
Probability  
Macroeconomics  
Microeconomics

### PROJECTED

Discrete Mathematics  
Machine Learning and Artificial  
Intelligence

## VOLUNTEER WORK

### KATYISD TENNIS CAMP

Summer 2018 2019 | Katy, TX  
• Volunteered as a tennis coach at  
KatyISD Tennis Camp.  
• Worked with children ages 6-14.  
• Coordinated warm-up activities.

## EXPERIENCE

### UNITEDHEALTH GROUP (OPTUM) | SOFTWARE ENGINEERING INTERN

June 2020 – August 2020 | Raleigh, NC

- Developed a full stack web application with React/Flask/MongoDB that fosters collaboration between developers on inner source libraries.
- Created RESTful API microservice using Flask to access NoSQL database.
- Taught myself how to deploy applications on OpenShift with CI/CD Jenkins pipeline and Docker.
- Presented and demonstrated final application and project business model canvas to senior leaders with an estimated company savings of \$3 million.
- Communicated with team members and organization leaders to leverage business resources in order to finalize production-ready solution.

### QUESTED | IOS DEVELOPER

September 2019 - January 2020 | Durham, NC

- Worked with team to develop an iOS application that teaches young children about leukemia.
- Collaborated with development team and product managers to scale the application's MVC architecture and wrote unit tests.

## TECHNICAL PROJECTS

### REACT PATHFINDING VISUALIZER | WEBSITE, GITHUB

Spring 2020 | Houston, TX

- Developed a Reactjs application that visualizes famous pathfinding and maze-generation algorithms.
- Implemented Dijkstra's algorithm, bidirectional search, depth first search, breath first search, and recursive maze division.

### POOL PARTY | WEBSITE, GITHUB

Fall 2019 | Chapel Hill, NC

- Developed a full stack web application that connects students in the Research Triangle Area (NC) who want to carpool to RDU International Airport.
- Utilized ReactJS, Node.js, Express, MongoDB, and Bootstrap.
- Built at HackNC Hackathon and collaborated with two teammates using Git.

### YANGTRACK | WEBSITE, GITHUB

Fall 2019 | Durham, NC

- Developed a web application that fetches tweets regarding Andrew Yang from the official Twitter API and performs sentiment analysis on the data.
- Utilized chart.js npm package to visualize sentiment analysis data.
- Built in ReactJS, Node.js, and Express.

## AWARDS

|      |          |  |
|------|----------|--|
| 2019 | National | USACO Platinum Division  |
| 2019 | National | National Merit Finalist  |
| 2019 | National | National AP Scholar  |
| 2018 | National | 1st place in Financial Math   Future Business Leaders of America                         |
| 2018 | State    | 1st place in Remote Sensing (Spatial Mapping)<br>Texas Science Olympiad State Tournament |