

Alex J Wang

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EDUCATION

DUKE UNIVERSITY

BS IN COMPUTER SCIENCE, MINOR IN
ECONOMICS AND STATISTICS
Expected Spring 2023 | Durham, NC
Trinity College of Arts and Sciences
Cum. GPA: 3.73 / 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 • C++ • Assembly • Agile (Scrum)
Shell • Jenkins CI/CD • OpenShift
Docker • npm • Heroku

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms
Computer Architecture
Multivariable Calculus
Linear Algebra
Probability
Macroeconomics
Microeconomics
Discrete Mathematics
Machine Learning
Operating Systems
Advanced Algorithms

PROJECTED

Databases
Computer Security
Network Architecture

VOLUNTEER WORK

KATYISD TENNIS CAMP

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

EXPERIENCE

FACEBOOK | SOFTWARE ENGINEER INTERN

May 2021 - August 2021 | Menlo Park, CA

- Developed a full stack web application with React/PHP that automates machine learning tasks and decreases onboarding time for advertisement ranking ML engineers at FB.
- Collaborated with team members to design a JSON decision tree schema that populates the React app and dynamically updates the UI based on user decisions.
- Created backend services that measure user metrics and sentiment, including time saved and increased productivity gained by ML engineers.
- Presented application to over 80 engineers, including several directors, and proposed plan for expansion of application to other FB teams.

UNITEDHEALTH GROUP (OPTUM) | SOFTWARE ENGINEER 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.

TECHNICAL PROJECTS

REACT PATHFINDING VISUALIZER | WEBSITE, GITHUB

- 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

- Developed a full stack web application that connects students in the Research Triangle Area (NC) who want to carpool to RDU Airport.
- Utilized ReactJS, Node.js, Express, MongoDB, and Bootstrap.

YANGTRACK | WEBSITE, GITHUB

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

AWARDS

2019	National	National Merit Finalist
2019	National	National AP Scholar
2018	National	1st place in Financial Math FBLA
2018	State	1st place in Remote Sensing (Spatial Mapping) Texas Science Olympiad State Tournament