# **JACK CHAU**

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#### **EDUCATION**

Tufts University Expected 2022

Bachelor of Science in Computer Science

Medford, MA

United World College Scholarship Recipient

- Relevant coursework: Computational Design, Data Structures, Algorithms, Cloud Computing, Software Engineering in Java, Urban Computing, Machine Structure and Assembly Language Programming, Distributed Systems, Machine Learning, Real Analysis 1
- GPA: 3.73, Dean's List

#### **SKILLS**

- Programming: C, C++, Python, Java, JavaScript, MATLAB, Mathematica
- Web Development: JavaScript, NodeJS, HTML, CSS, Bootstrap, MongoDB, RESTful APIs, cloud infrastructure (AWS, Hadoop, Hive)
- Other: TensorFlow, Linux, Git, Apache Spark, Microsoft Office, Unit Testing

#### **EXPERIENCE**

## **Incoming Software Engineering Intern**

Starting June 2020

athenaHealth

Watertown, MA

#### **Software Engineering Research Fellow**

Aug. 2019 - Present

Department of Urban and Environmental Studies

Medford, MA

- Design Python scripts interacting with various APIs to retrieve geo-data from social media websites across the US and China
- Develop systems to manage and analyze over 100GB of data, resulting in in-depth understanding of users' mobility within the US
- Employ Hadoop and Spark to find significant patterns that help improve land use, financial flows, and growth near transit locations
- Monitor and write tests for running code on Tufts High Performance Computing Cluster to prevent over-querying

Tufts Hackathon Medalist Oct. 2019

Google Cloud Award

Medford, MA

- Spearheaded and developed DiningTracker, a web-app that retrieves data from Tufts dining websites daily and advises on caloric intake
- Coordinated with Tufts Dining Service to leverage and implement named application into wider usage among student body

### **Summer Intern and Teaching Fellow**

Jul. 2019 – Aug. 2019

The Lawrenceville School

Lawrence Township, NJ

- Led a team to develop MERGE, an interactive, mobile-friendly web-app that helps teachers keep track of class discussions
- Co-taught middle and high schoolers in a Computer Programming class

## **Community Outreach Representative**

April. 2019 - Present

Tufts Vietnamese Student Club

Medford, MA

- Connect cultural clubs and opportunities in Boston with the Viet community at Tufts, forming a network with over 20 schools
- Lead and organize coffee shops throughout the year to celebrate Vietnamese traditions

## Freshmen Residential Advisor

May. 2019 – Present

First-year Assistant

Medford, MA

- Mentor freshmen throughout the entire year
- Initiate community activities that help acclimate freshmen to life at Tufts
- Correspond with the Residential Life to ensure a supportive and healthy community on campus

#### **PROJECTS & EXTRACURRICULARS**

- **DiningTracker:** A web-app that queries and stores daily data from Tufts Dining Service websites and advises its user on dining options based on their daily caloric intake. Currently used by Tufts students and implemented into Tufts Server (HTML/CSS, Python, Google Cloud Platform, Google Datastore, RESTful APIs)
- **smART:** A website that advises users on fashion options and styles based on their given input. Currently focusing on partnering with social media influencers to expand the scope of users (HTML, Bootstrap, NodeJS, MongoDB)
- **UrbanismX:** A tool that helps with retrieving geo-data from social media websites and extracting meaningful correlation between data (*Python, Spark, RESTful APIs*)
- **DaVi:** An interface that visualizes data of people's commuting habits in urban areas. Currently being implemented in a research project on urban planning (*Python, HTML, CSS, React, KeplerGL*)