# Melanie A. Chow

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### **EDUCATION**

University of Chicago, Chicago, IL

Expected June 2021

Bachelor of Science in Computer Science, Minor in Statistics | GPA: 3.9

Stuyvesant High School, New York, NY

Graduated June 2017

Advanced Designation with Honors | SAT: 2340 | GPA: 4.0

#### **EMPLOYMENT**

**Braintree Payments** 

June - August 2019

Incoming Software Engineer Intern

Medivis Inc.

June - September 2018

Software Development Intern, Brooklyn, NY

- Designed and created a CosmosDB database to effectively store and reorganize anatomy part data.
- Wrote shell scripts to migrate over ten thousand cells of data from Google Sheets and Autodesk Maya to the new database (Python, JavaScript).
- Built a web UI for the 3D-modelling team to add and update anatomy parts, and for University clients to view additional anatomy part information (Angular, Heroku).
- Built and designed a REST API to regulate data transfer between the interface and database (Express, SQL).
- Engaged in code reviews and wrote extensive documentation for each component of the system.

## **PROJECTS**

DestressCyborg February 2019

Wearable tech (proof-of-concept) that monitors brain waves to blur out or replace visual objects that may induce stress

- Trained a computer vision model using the Darknet Framework to detect objects that gave the user stress.
- Analyzed brain wave feeds to determine what combination of frequencies indicated a user was stressed.
- Winner of "Best Use of an IoT Device" and "Most Uncommon Hack" at Uncommon Hacks 2019

GreenFeed October 2018

A mobile application that aims to engage low-income residents in sustainable practices by offering incentives

- Offers a community for NYC Housing Authority (NYCHA) residents to share their 'green' activities, such as how many bags they've recycled, pounds of compost they've donated, or number of hours they've volunteered.
- Generates pie charts to illustrate the "green" status of each housing unit, and cultivates friendly competition by offering prizes to the most sustainable unit.

SafeRoute September 2018

A web application that determines the safest route home, based on NYC public crime data.

- Determines a safety score for each route based on the number and type of crime along the path, using geocoordinates from the Google Places API.
- Generates a crime heat map, as well as a 'cluster map', that displays crime locations with informative markers.

#### **ACTIVITIES**

**UChicago TechTeam** *Developer*, Chicago, IL

October 2018 - Present

• Created a mobile application for the Chicago Department of Health to easily help medical providers look up, research, and report diseases and protocols.

Worked on restructuring the data and helped refactor the application from Ionic to React Native.

#### **International Leadership Council: Entrepreneurship**

September 2017 - Present

Associate, Chicago, IL

- Planned and taught modules to new members on market research, pitching, and business management fundamentals.
- Co-founded a stationery subscription startup that raised over \$5,000 in 100 days, and won the award for Most-Profit-Made in the club's 100 Day Startup Challenge. Served as marketing head.

## **TECHNICAL SKILLS:**

**Programming Languages:** C, JavaScript, Python, Java, CSS, HTML, R, SQL **Frameworks & Development Tools:** Git, VSTS, Angular, Express JS, Node JS

**Other:** Adobe Photoshop CS6, Microsoft Office