# Melanie A. Chow

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## **EDUCATION**

University of Chicago, Chicago, IL

Expected June 2021

Bachelor of Science in Computer Science | GPA: 3.93

Stuyvesant High School, New York, NY

Graduated June 2017

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

# **EMPLOYMENT**

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 database in order 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 how data is transferred between the web interface and the database (SQL, Express JS, Node JS).
- Presented reports on the cost and time efficiency of various database designs in front of all my colleagues.
- Engaged in code reviews and wrote extensive documentation for each component of the system.

Environment New York July - August 2017

Field Manager and Canvasser, New York, NY

- Raised over \$3,000 in 3 weeks to fund research on keeping waterways clean, and to promote environmental awareness in the local area.
- Trained, supervised and led 2-3 rotating canvassers by stationing them in population-dense areas and providing effective techniques and feedback. Teams fundraised around \$800 per day.

#### **PROJECTS**

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**

# **International Leadership Council: Entrepreneurship**

September 2017 - Present

Associate, Chicago, IL

- Co-founded a 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 the Marketing Head for the startup, which included creating the logo, the website, slideshows, posters, and planning social events.
- Planned and will help teach modules on topics including marketing research, UI/UX design, public speaking, and business management fundamentals.

The Cooper Union

July - August 2016

Researcher, New York, NY

- Analyzed alternative sources of fuel using gas chromatography-mass spectrometry (GC-MS) to determine fuel components, and modeled over 70 molecules in Spartan to calculate the amount of energy released.
- Wrote and presented my final paper at a research symposium to an audience of invited guests, including hundreds of peers and various professors of the university.

## **TECHNICAL SKILLS:**

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

Other: Adobe Photoshop CS6, Microsoft Office