# MELVIN CANELA 1888 Seward Ave Apt 2, Bronx, NY 10473 1-(347)-282-1221

Email • Github • Website • Linkedin

### **Education**

**School:** City College of the City University of New York

Jun 2016

Degree: Bachelor of Science in Applied Mathematics and a minor in Computer Science

### **Skills**

#### **Technical Skills:**

**Programming Languages:** HTML • CSS • JavaScript • Python • SQL **Frameworks/Libraries:** React • Angular • Node • SciPy • Django **Developer Tools:** GIT • Gulp • Webpack • Linux Command Line

# **Work Experience**

### Software Consultant at Homer Logistics Inc. New York, NY

Mar 2016 - Apr 2016

Developed a web application that displayed the company's delivery fleet information in real time. Also applied performance updates and expanded functionality to the analytical tool that I developed during my internship at Homer.

- ❖ Discussed, analyzed, and strategized design details with CEO.
- Deployed web application in collaboration with Developers using Agile methodologies.
- Performed rigorous unit and data interface testing.

## Software Developer Intern at Homer Logistics Inc. New York, NY

Sept 2015 – Dec 2015

I was assigned the task of developing an analytical tool that investigated the geographical coordinate data of Homer's delivery fleet to detect and report DOT (Department of Transportation) violations.

- Performed topological research on Manhattan and explored various geospatial algorithms such as the Haversine formula to accompany solution.
- ❖ Developed the front end utilizing open source software such as D3.js to display data.
- ❖ Documented code with comments and recorded updates in patch notes.

### **Side Projects**

### **Title: MTA Transit Live Feed Interface**

Sept 2016 – Present

Using MTA's (Metropolitan Transportation Authority) live feed data, I am constructing a predictive model that simulates and visualizes the location of the trains in real-time.

- Developed a restful API endpoint and utilized web sockets to deliver real time updates.
- Constructed a seamless workflow architecture with Webpack and Gulp.

#### Title: Santa's Stolen Sleigh - A Kaggle.com competition provided by FICO

Dec 2015 - Jan 2016

**Objective:** With a list of gifts and their respective weights and destinations, find the most efficient routes and cargo size for Santa Clause to deliver his presents on his sleigh.

- Applied the agglomerative hierarchical clustering algorithm to group geospatial data points.
- Used a greedy nearest neighbor algorithm with 2 opt swap to find the local minimum distance to travel.
- Utilized Python as the scripting language and PostgreSQL as the database management tool.
- Scored above the 80<sup>th</sup> Percentile.