# Joseph Liu

(347) 831-6776 | j.liu2707@gmail.com | Brooklyn, NY | https://github.com/StudentJL | www.linkedin.com/in/joseph-liu7 EDUCATION

New York City College of Technology (NYCCT), City University of New York (CUNY)

Brooklyn, NY

Bachelor of Science in Data Science | GPA: 3.66/4.00

Expected December 2022

Bachelor of Science in Biomedical Informatics | GPA: 3.66/4.00

January 2019

#### **Relevant Coursework:**

Information and Data Management, Introduction to Data Science, Programming Fundamentals, Database System Fundamentals, Data Structures & Algorithms, Object Oriented Programming, System Analysis and Design

#### **SKILLS**

**Programming:** Java, Python, SQL, R, HTML

**Technologies:** IntelliJ, RStudio, Google Colab, GitHub **Spoken Languages:** Cantonese (Conversational)

#### **PROJECTS**

#### **CTP Back-In-Person Hackathon**

Sept 2021

- Participated in a team developing a demo for an online time management app that estimates the amount of time a student needs to study to attain their desired grade in a particular course.
- Contributed by creating the Front-end of the website using Python and the PyWebIO library web framework.

# **NYC Drinking Water Quality Distribution Analysis**

Dec 2020

- Utilized Pandas to glean significant information about ion and bacteria levels of NYC drinking water from the Drinking Water Quality Distribution dataset obtained from NYC Open Data.
- Used Matplotlib to visualize changes in drinking water quality over time in specified locations.

### RELEVANT EXPERIENCE

CUNY Tech Prep

New York, NY

Data Science Fellow

Jun 2021 – Present

• Learning in-demand technologies like Python 3, Jupyter Notebooks, Pandas, Numpy, Scikit-learn, and SQL as well as industry best practices for exploratory data analysis (EDA), feature engineering, data collection and processing, statistical modeling, data visualization, machine learning techniques, data science process, and big data.

Beta NYC New York, NY

Civic Innovation Fellow

Feb 2021 – Apr 2021

- Participated in BetaNYC's New York City Civic Innovation Fellowship, where we studied NYC government, history, and Open Data. Learned to use tools capable of filtering and visualizing data, such as Open Data Platform, Boardstat, Data Wrapper, and Excel.
- Together with partners, built slide decks and held 3 virtual Open Data classes to teach 10-30 members of the public how to use various online tools to access Open Data.

## Weill Cornell Medicine, Englander Institute for Precision Medicine

New

York, NY

**Bioinformatics Intern** 

Apr 2018 – July 2018

- Created a pipeline using Bash, R, and Python, to analyze coverage data obtained from 2,857 tumor samples.
- Utilized multiple alignment softwares, including BWA mem, Bowtie 2, and bbmap, to realign tumor samples' unmapped reads to the human genome to increase the quantity of coverage at the human genome's cancer hotspots.
- Assembled a written report, summarizing the process in a flowchart, and the datasets in bar plots and boxplots.
- Orally presented the project results to a group of 10+ interns and hospital personnel.