

# SEBASTIÁN ROMERO CRUZ

sebastianromerocruz.github.io

(914) 318 8893

sebastian.romerocruz@nyu.edu

## Technical Skills

**Programming Languages:** Python, JavaScript, HTML, CSS, Java, C#, C++

**Operating Systems:** MacOSX, Windows, Linux

**Software, Engines, and Frameworks:** jQuery, Bootstrap, D3.js, Node.js, Apache Spark, Docker, Git/GitHub

**Languages:** English, Spanish (fluent); Japanese (conversational)

## Education

**New York University Tandon School of Engineering** – New York, NY 2020

*Master of Science: Computer Science* | GPA: 3.8

**New York University Tandon School of Engineering** – New York, NY 2017

*Bachelor of Science with Honors: Chemical and Biomolecular Engineering* | GPA: 3.4

## Professional Experience

**New York University Tandon School of Engineering** – Brooklyn, New York January 2020 – Present

*Adjunct Faculty*

- Forming part of the Introduction to Programming and Problem Solving with Python team, instructing 6 laboratory sections across a total of 227 students, providing them with practical application of lecture material.
- Holding biweekly homework help sessions as well as exam review sessions prior to every midterm and final exam.

**Skandinaviska Enskilda Banken (S.E.B.)** – New York, New York June 2019 – September 2019

*Data Science Intern*

- Using the Google Places and OpenStreetMap APIs, developed a geocoding program capable of extracting the geometry of the physical assets of 100,000+ global companies across 11 sectors and 70 industries.
- Implemented appropriate pre-processing, filtering, and identity matching algorithms including a custom stop-word remover and a fuzzy-string token matching system towards refining the results.

**Polytechnic Tutoring Center** – Brooklyn, New York May 2018 – December 2019

*Computer Science Tutor / Writing Consultant*

- Provided tutoring for the *Introduction Programming* in Python undergraduate course, as well as aided in composition and proofreading of student technical papers and career-related documents.
- Hosted a weekly “Conversation Café” in which a group of 10-20 international students participate towards improving their English language speaking ability under a relaxed setting.

## Projects

**Reframe (Mobile Game): Advanced Project in Computer Science in Unity** September 2019 – Present

- Developed a 2D, “decluttering” simulation video game in Unity (C#), fully in charge of programming, artwork, writing, and score composition, set to be released in 2020 Q2 for iOS.
- Using Logic Pro X for music and sound design, as well as Aseprite for graphics, developed a full suite of game assets including a full soundtrack, sound effects, backgrounds and items.

**Pitchfork Review Sentiment Analysis** February 2019 – May 2019

- Lead a team of 5 towards creating an automatic, fully scalable quantitative music scoring service using natural language processing (NLP) of 18,393 music reviews using Apache Spark.
- Developed a logistic regression machine-learning model that maximized the multi-class classification F-measure of the model to 0.383, improving on the original linear regression model.
- Designed the data pre-processing pipeline, including stop-words removal, word vectorization, and term frequency filtering.