

# Rene Sanger

renejsanger@gmail.com | +1 (917)-663-0042 | github.com/renesanger  
www.linkedin.com/in/renesanger | Brooklyn, New York

---

## Objective

Seeking internship opportunities to gain skills and work experience in the Computer Science field.

## Education

Hunter College | *Daedalus Cohort Scholars program* September 2016 – current  
BA- Computer Science *Scholar Program* | Minor in Mathematics  
GPA: 3.62

Brooklyn Technical High School September 2012 – June 2016  
Brooklyn Technical High School Diploma *with Honors* | Computer Science Program

## Experience

Library Page at the Bay Ridge Public Library January 2016 – May 2016

- An indirect service provider helping to maintain the availability of library materials by shelving books and other materials, reading the shelves and organizing materials into their proper sequence.
- Answers in-person inquiries, helps customers locate needed materials and refers customers to other appropriate assistance.
- Develops a working knowledge about the organization and care of library materials and library services and programs

## Projects

### *New York City Tree Census Data Analysis*

Program that reads a large dataset of 683,000 lines of text and creates a pseudo-server that places tree objects in an AVL tree for easy access. The big data set is a csv file of trees in New York City Streets. The program allows users to access a tree's data such as its address and common name.

### *MTA Subway Entrance Data Analysis*

Parsing New York City MTA Open Data of the public train system and determining which entrances are part of the same stations, which stations are part of the same train lines, and which stations and/or trains are closest to a given GPS location. Implemented unions of disjoint sets and using hash tables to store train station objects.

### *Mastermind AI Strategy*

Cooperated with a team of 4 to develop a A LISP Mastermind player, an artificial intelligence program implemented using an AI memory object holding the responses of previous guesses to find the solution. Graphed and analyzed the success of each guess and the scalability of the player. Implemented and improved a version of Rao's algorithm that reduced the number of guess attempts.

## Skills

### *Programming Languages:*

C++, Python, HTML, CSS, JavaScript, Java, LISP

### *Framework:* Flask

Autodesk Inventor Certification (2012)

## Awards/Achievements

Daedalus Cohort Scholars program (2016-current)

Autodesk Inventor Certification (2012)

AP Scholar award (2016)

Honor Roll (2012-2016)

## Leadership

*President of Core Young Adult group at Bethel International Church* January 2016 - current  
Scheduling, organizing events, Outreach ministry for Young Adults. Public speaking and encouraging energy and enthusiasm. Creating an environment where youth can feel comfortable in religious practice.

---