e-mail: nick@nicholasyang.com tel: (347) 515-1032

#### **Education**

2012-2016 Stuyvesant High School 2017-2021 New York University

#### Languages/Technologies/Tools

Proficient: Ruby, Ruby on Rails, Python, Flask, Git, Emacs, Bash, PostgreSQL, JavaScript, React, Redux

Familiar: Java, C++, Clojure, Scheme, JIRA, MySQL

### **Work Experience**

#### 3/17-6/17 Intern YouVisit LLC

Software development for YouVisit's virtual reality product Experience Viewer. Emphasis on modern web development tools such as React, Redux, RxJS, ImmutableJS, etc. Helped refactor and redesign parts of codebase. Used Agile methodology with JIRA.

### 7/16-10/16 Intern, Maritime Capital LLC

Software development using Ruby (Rails), PostgreSQL, and C++. Heavy emphasis on extensible and maintainable code using design patterns.

### 9/15-5/16 Teaching Assistant, Computer Science and Technology for Urban Youth.

Taught Python to middle school and high school students. Work involved planning and implementing lesson plans involving essential programming concepts such as loops, variables and recursion.

## 5/15-9/15 Intern, Dynamical Systems Laboratories at NYU Tandon School of Engineering.

Faculty Supervisor: Professor Maurizio Porfiri

Developed a mechanical model of a Nandus Nandus fish using a Gumstix Overo microcontroller. This mechanical model was to be used for experiments involving machine learning. Also utilized MATLAB, Python and Arduinos.

# **Software Projects**

- 7/17- Stuyvesant Spectator Website (git.io/v7wwc) Website for high school newspaper. Consists of two front end applications, a client facing website and a content management system, written in React, and a backing API written in Ruby on Rails. Utilizes libraries such as Redux and Reselect. Currently leading 6 students in developing the website. Deployed using CircleCI and AWS.
- 3/17 Air Alexa (git.io/vSmL1)

Virtual reality air traffic control simulator using Amazon Alexa. Used custom models for VR. Built with Ruby on Rails, SQLite, A-Frame, React, Node.js and AWS Lambda. Won C2's Best Hack for Air Traffic Control at MHacks

2/17 Fashion Tree (git.io/vDj70)

Scrapes clothing data from various websites, then analyzes their water and energy consumption and displays an ecological index from 0-100 per clothing item. Written in Ruby on Rails with PostgreSQL. Won Sustainability and Social Impact prize at HackNYU.

11/16- Blog (git.io/vMS8n)

Written in Ruby on Rails with Postgres backend. Deployed at Horribly Underqualified.com.

9/16 DJ Rainbow Pie Music Visualizer (git.io/v1LPA)

Designed for PennApps Fall 2016. Flask application that visualizes music using an Arduino and an APA102C LED strip. Application did live pitch analysis on uploaded music with a custom algorithm used to determine the color of the LEDs.

5/16-6/16 Vigilant Web Gallery (git.io/voV3Q)

Designed for Stuyvesant Software Development course. Flask application that displays images for Stuyvesant Graphics course.