# **Jonathan Tran**

https://github.com/jontran1

#### **EDUCATION**

Grove School Of Engineering City College Of New York, NY -- B.S. in Computer Science. GPA 3.42, Dec 2019.

### **SKILLS**

**Primary Programming Languages:** Java.

**Programming Languages Used:** Java, Python, Javascript, HTML, CSS.

**Software Applications Used:** Intellij, Android Studio.

#### **SCHOOL PROJECTS**

# NC-Hash (Group Senior Design) (Spring 2019):

- An application that hashes images locally without the user knowing how the hashing took place. This application is to combat non-consensual images.
- Exclusively worked on the front-end using **JavaFX** to ensure users feel safe.
- Group was accepted into the Cyber **NYC Inventors to Founders** program based on the application.

#### **Document Sharing System (Group)** (Fall 2018):

- Developed a document sharing system using **JavaFX** and **JDBC API** for backend **MySQL** database.
- Helped implement database schemas, backend database calls for documents, taboo word detection, and text editor.

#### **GameBook (Group)** (Fall 2018):

- A simple social media website, where users can reach out to other users based on games played.
- Helped implement and design web pages layout and database schemas.
- Implemented using JavaScript, node.js, express.js, MySQL, and HTML.

#### **Simple Artificial Life Simulation** (Spring 2018):

- A simple self sustaining Artificial Life simulation using a 2D matrix as representation for the environment. Canviores, herbivores, and plants would hunt, reproduce, age, and die.
- Implemented using Java, polymorphism and inheritance.

## **SIDE PROJECTS**

#### **Graph-search-pathfinding-visualization** (2020):

- An algorithm visualization web app. Generate an interactive maze and visualize how **DFS**, **BFS**, **Dijkstra's algorithm**, **A\* Search algorithm**, and **Greedy Best First Search** works.
- Implemented using JavaScript, p5.js, HTML, CSS, and Bootstrap.

# **Fitboi.tech (NS Hackathon** 2019 at Lehman College, Group Project):

- Fitboi.tech is a web application to help improve physical health. Used two models to determine body fat percentage. Neural networks and image recognition (Accuracy was too low). A simpler **replacement** model using linear regression with body measurements as features.
- Implemented using Python Django web framework, Ski-learn, Pytourch, and HTML.

## **Fan Fictor Django Web App** (Summer 2019):

- A simple social media website where users login and create various works of fiction. Users can create new fictions, modify old works, and comment on public stories.
- Implemented using **Python**, **Django web framework**, **SQLite** for backend, and **Django templates** (HTML) for frontend.

# Fits Android Application (Summer 2019):

- An android application designed to help users keep track of items they're interested in purchasing.
- Designed GUI, classes, database schemas. Used Activities, Fragments, and Activity lifecycle.
- Application was implemented using Java, Android's SDK, SQLite, and Android Studio.