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Jonathan Tran

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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.

SCHOOL PROJECTS

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

- An application that hashes images locally without the user knowing how the hashing took place. Main purpose of 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.

N-Queens Genetic Algorithm (Spring 2019):

- To greatly improve the backtracking solution run time; a genetic algorithm was implemented. This genetic algorithm will choose the two most fit "solutions" from a population, mate, mutate, and repeat until a solution is found. The project was written in **Java**.

Document Sharing System (Group Project) (Fall 2018):

- A document sharing system letting users create, save, edit, share, and version control documents.
- Helped implement various features such as, taboo word detection. text editor, and **MySQL** and **JDBC** database calls; along with, graphic user interface using **JavaFX** and **Java.**

GameBook (Group Project) (Fall 2018):

- A social media website to showcase the group's relational database knowledge.
- Designed some of the web pages layouts, database schemas, API calls to the **MySQL** database, and the sql script for setting up the database.
- Front-end was written in **JavaScript, HTML,** and **CSS**; database using **MySQL.**
- Technologies used were, **node.js**, **express.js**, **and handlebars.js.**

SIDE PROJECTS

Graph-search-pathfinding-visualization (2020):

- A web application that helps users visualize how algorithms work. Algorithms like, **DFS, BFS, Dijkstra's algorithm, A* Search algorithm, Greedy Best First Search** and **Bi-Directional Search.**
- Application was written in **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, but the accuracy was too low. Implemented a backup model using linear regression with body measurements as features.
- Implemented using **Python Django web framework, Ski-learn, Pytourch,** and **HTML.**

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, and back-end calls to the **SQLite** database.
- Application was implemented using **Java**, **Android's SDK**, **SQLite**, and **Android Studio**.

Fan Fictor Django Web App (Summer 2019):

- A simple social media website where users login and create various works of fiction. Users can create works of fiction for public or private use, edit, and comment.
- Implemented using **Python**, **Django web framework**, **SQLite** for backend, and **Django templates (HTML)** for frontend.