55 Clark St, Apt 942
Brooklyn, NY 11201

GARRISON T. SHEPARD

(929) 285-9754
shepard.garrison.t@gmail.com
https://github.com/gtshepard
https://linkedin.com/in/gtshepard

EDUCATION

New York, NY **City University of New York Hunter** **Fall 2015 - Present**

- B.A in Computer Science, Summer 2019. GPA: 3.04
- Undergraduate Coursework: Cloud Computing; Functional Programming; Databases; Computational Theory; Operating Systems; Android Development; Algorithms and Data Structures; Comp Arch. I & II

TECHNICAL EXPERIENCE

Schoolify **JavaScript/React.js/Python/Flask** **Spring 2019**

- Designed and created UI that is populated from multiple data sources using React.js.
- Defined an RESTful API interface with endpoints that map to CRUD operations for a relational data store using the flask web framework with JSON as an open standard response format.
- Designed, implemented, and tested a relational database schema using PostgreSQL.

Operating System Simulation **Python** **Fall 2018**

- Built 13 user driven shell style operating system commands with input parameters.
- Implemented a classical paging memory management scheme for the system simulation.
- Created an algorithm to find and kill any process in the system simulation based on a process ID.

Restriction Enzyme Database **C++** **Spring 2016**

- Engineered a parser for a real world data set with 700+ lines of data.
- Implemented an AVL tree with lazy deletion for efficient restriction enzyme lookup result was O(*log n*) query time; look up feature was tested against a data set containing 400 lines of DNA sequences.
- Created a recognition site detection algorithm which indicates where the DNA sequence was cut (the recognition site) by a restriction enzyme.

Sudoku Solver **C++** **Fall 2016**

- Engineered a backtracking algorithm that uses a stack to test board possibilities; is functional for game boards that require less than 10,000 backtracks to solve the puzzle.
- Built a Sudoku game board parser that reads in boards from a text file.
- Created an empty board space detection algorithm to help determine the next move in the game.

ADDITIONAL EXPERIENCES

Resident Advisor **St. George Residence Hall EHS** **March 2017 - Present**

- Supported a community of 1500 students; ran administrative desk; first responder to 20 crisis situations; held 30 events with average attendance of 15 students; appointed recognition coordinator for staff.

Computer Science Club **Co-Founder & President** **Fall 2016 - Spring 2018**

- Planned, orchestrated, and hosted a variety of a workshops on topics such as, git, hackathons, tech interviews, iOS, and Android with an average attendance of 15 – 20 Students.

TECHNICAL EMPLOYMENT

Seasonal IT Infrastructure Intern **NYCM Insurance** **Summer 2013 - Jan 2016**

- Built and provided base configuration for 30+ production environment servers on a VMware ESXi platform via VMware V-center.
- Led RSA two-factor authentication project in which RSA security software was installed on 40+ machines to work in conjunction with RSA token generators.
- Led 10+ routine business meetings on server pruning project (removing 50+ outdated and unused servers that pose as a security threat).

LANGUAGES AND TECHNOLOGIES

- Python; JavaScript; C++; SQL; React.js; Flask; pyscopg2; git;