Nixon Lazaro

New York, NY | nicklazaro14@gmail.com | Github | LinkedIn

EDUCATION

Hunter College, City University of New York (CUNY)

New York, NY

Bachelor of Arts in Computer Science

December 2021

Relevant Coursework:

C++ Programming, Data Structures and Algorithms, Discrete Mathematics, Computer Architecture, Operating Systems, Cybersecurity, Data Science, Python Programming

SKILLS

Programming: (strong): C++, Python (familiar): Java, Kotlin, HTML, CSS, JavaScript

Technologies: Visual Studio Code, Git / Github, PyCharm, IntelliJ IDEA, Unity, LaTeX, Wireshark

Certifications: CodePath Cybersecurity (May 2021) | CodePath Intermediate Software Engineering (December 2021)

PROJECTS

Personal Website: https://nlazaro.github.io (for additional information and projects)

File Systems | GitHub

- Designed and created a file system that creates a disk drive as a text file that contains a superblock, inodes, FAT, and data blocks using a linked list or index list allocation method
- Has a functioning terminal that allows the user to move around the directory and interact with files
- Utilized: C++, Linked Lists, Pointers, Stacks & Queues, Hash Table, Fstream

Sorting Algorithm Visualizer | Github

- Replicated various sorting algorithms visually which includes: bubble sort, merge sort, selection sort, insertion sort, quick sort, and bogo sort
- Contains an interactable window that can control speed, and can switch between ascending/descending order
- <u>Utilized</u>: Python, Pygame, Generators, Hash Table

NYC Vehicle Collisions | GitHub

NYC Department of Transportation

- Visualized motor-vehicle collisions in NYC since 2016 with data directly from NYC open data
- Implemented an interactive folium map showcasing markers with exact coordinate locations of collisions
- <u>Utilized</u>: Python, Pandas, Matplotlib, Seaborn, Folium

EXPERIENCE

Data Science, Intern

New York, NY

July 2021 - Aug 2021

- Improved the spatial data gathering program, a high-profile project that uses a web portal containing 360-degree imagery & liDAR point clouds to gather data on hundreds of DOT assets on NYC streets
- Digitized, updated, & created metadata associated with the shapefiles & data dictionaries; created forms, queries, reports, and validation logic; created scripts/visualization using Python

Research Fellow (for VR/MR/AR & Visualization)

New York, NY

Department of Computer Science, Professor Wole, Hunter College

Aug 2020 - Dec 2020

- Designed and built virtual reality applications in Unity3D such as 3D human faces & body reconstructions from images by using open source libraries
- Implemented user studies and wrote results into a publication with fellow researchers in LaTeX

Undergraduate Teaching Assistant

New York, NY

Department of Computer Science, Hunter College

Aug 2019 - June 2020

- Led tutor sessions individually, and group discussion sections to ensure understanding of course material
- Designed and graded student assignments, coding projects, and exams (Python & C++)

LEADERSHIP