

HARRY GOSSE

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EDUCATION

University of Michigan College of Engineering

Computer Science *GPA: 3.23*

Ann Arbor, MI

Sep 2018 - May 2021

Relevant Coursework: Web Systems (EECS 485) · Introduction to Operating Systems (EECS 482) · User Interface Development (EECS 493) · Introduction to Computer Security (EECS 388) · Foundations of Computer Science (EECS 376) · Data Structures and Algorithms (EECS 281) · Introduction to Computer Organization (EECS 370) · Discrete Math (EECS 203)

Bronx High School of Science

High School *GPA: 93.38*

Bronx, New York

Sep 2014 - Jun 2018

WORK EXPERIENCE

MTA New York City Transit

Database Developer Intern

Queens, New York

June 2020 - Nov 2020

- Tasked with design, development, testing, implementation and optimization of a database which will be used to track and monitor collective bargaining, contract administration, employee availability and farming out of work initiatives within the MTA Office of Labor Relations.
- Implemented a Python web crawler which scraped news articles and extracted key information to generate a daily digest to judge the public perception of transit services.

RE/MAX In the City

Intern

Bronx, NY

July 2019 - August 2019

- Organized and analyzed sales data using productivity software
- Helped design advertisements for real estate listings

PROJECT EXPERIENCE

Smart Rainwater Barrel *Python*

Designed a smart storm water irrigation barrel calculating optimal amounts of water to release from weather and sensor data as a solution to water scarcity

Traveling Salesperson *C++*

Implemented a program that calculates the optimal tour for the TSP. The program can also calculate a close to optimal tour in significantly less time using MST approximation

Little Computer 2000 *C*

Created a functioning compiler and linker to turn multiple assembly programs into executable files and a simulated environment in which those files were interpreted and run in a fully working pipeline with a simulated cache

Client/Server Side Dynamic Website *Python, Javascript, SQLite, React*

Built a client application using Python, Flask, JavaScript, React and asynchronous programming that makes AJAX calls to REST API to emulate Instagram with attributes such as infinite scroll, dynamic like and comment, and session control for each users

Threading Library *C++*

Created a threading library that balances workloads across multiple CPUs. Included implementation of basic multithreaded interfaces like threads, mutexes, and condition variables.

Sports App *Javascript, Firebase, Vue*

Created a website that allowed only University of Michigan students to find other students that want to participate in group activities. This was done by having the sign-up page only accept emails with umich.edu domain.

SKILLS

Technical: C++, Python, Verilog, Go, HTML, Javascript, Flask, React, Vue, SQL, Jinja, Git
Environments: Windows, Linux, Visual Studio