

# HARRY GOSSE

46W 21st St Huntington Station, NY 11746 · gosseh@umich.edu · (646)-940-0945

## EDUCATION

---

### University of Michigan College of Engineering

Computer Science *GPA: 3.31*

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: 4.00*

Bronx, New York

Sep 2014 - Jun 2018

## WORK EXPERIENCE

---

### Juniper Networks

*Software Engineer Intern*

Sunnyvale, California

May 2021 - Present

- Packet forwarding team
- Implemented a command line interface for the Advanced Forwarding Toolkit ledger so that the configuration history of the packet forwarding engine can be displayed.

### 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 forming 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, New York

July 2019 - August 2019

- Organized and analyzed sales data using productivity software.

## 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 user.

### Threading Library *C++*

Created a threading library that balances workloads across multiple CPUs. Included implementation of basic multi-threaded 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