

# SHANNON LAU

Software Engineer

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## SKILLS

### Languages

C++  
Python  
Java  
Javascript  
Scheme  
HTML/CSS

### Tools

Flask  
SQLite3  
MongoDB  
Git  
MATLAB

### Operating Systems

Linux  
Mac OS X  
Windows

## RELEVANT COURSEWORK

*Data Structures & Algorithms*  
*Foundations of CS*  
*Probability & Statistics*  
Intro Data Structures  
Discrete Math  
Calculus I, II, III  
Software Development  
Graphics Algorithms  
Electronics in Space  
Digital Logic Design  
*Italicized denotes Fall 2019*

## HONORS

### SES Summiteer

Capital One

### OxyGEN Scholar

AT&T

### Inductee

ARISTA Honor Society

### AP Scholar with Distinction

College Board

### Commended Student

NMSQT

## EDUCATION

### University of Michigan, Ann Arbor, MI — *B.S. Computer Science*

EXPECTED JUNE 2022

GPA — 3.88 / 4.0. Awarded *University Honors* and *Dean's Honor List (College of Engineering)*.

### Stuyvesant High School, New York, NY

2018

GPA — 4.0 / 4.0. Graduated with honors in math and science.

## PROJECTS

### 4 GIFS 1 Word ↗

Spin-off of the popular picture guessing game, but with gifs. Integrated with GIPHY and Datamuse API using Python, Flask, SQLite3 and Javascript.

### Jimmy Jams ↗

Online platform to request and queue up music for your group in real time. Integrated with Spotify API using Python, Flask, and SQLite3.

### Quickr

Conceived and designed concept idea for an iOS app to track daily events of a special needs individual, featuring streamlined logging via NLP. Awarded *Best App Design* by Spark for Autism.

### ERS: Electronic Edition

Constructed an electronic game system with physical push buttons to simulate the card game Egyptian Rat Screw. Button lock-out mechanism achieved through digital chips and flip-flops.

### Unparagoned ↗

Command-line program that predicts subsequent sentences of a given excerpt by analyzing text frequency. Written in Java using simplified Markov chain data structures.

## EXPERIENCE

### New York City Transit, New York, NY — *Intern*

JULY 2018 - AUGUST 2018

- Managed confidential database and increased efficiency and accessibility of the file system.
- Analyzed incident claims to determine potential solutions for customers and the company.

### StuyHacks, New York, NY — *Sponsorship Organizer*

SEPTEMBER 2017 - JUNE 2018

- Contacted companies requesting monetary and in-kind donations to fund hackathons.
- Oversaw 12-hour and 24-hour events for 300+ high school students across New York City.

### JC Sports, New York, NY — *Marketing Intern*

JUNE 2016 - AUGUST 2016, JUNE 2017 - AUGUST 2017

- Improved company branding by designing brochures, flyers, and business cards in Photoshop.
- Consulted clients for quotes, orders, and shipment updates for satisfactory customer service.

## EXTRA-CURRICULAR ACTIVITIES

### Michigan Flywheel Ultimate Frisbee, Ann Arbor, MI

SEPTEMBER 2018 - PRESENT

*Gear Coordinator* (AUGUST 2019 - PRESENT): Design and order jersey kits, apparel, and gear for 50 players and coaching staff.

### Stuyvesant Phoenix Varsity Basketball, New York, NY — *2x Captain*

OCTOBER 2014 - MARCH 2018

Led, empowered, and mentored 12 girls to succeed as a team. Top 20 assists leader in NYC.