# JUSTIN SHIQI LIU

47512 Alpine Dr, Novi, MI 48374 • jsliu@umich.edu • (248) 592-4718

#### **EDUCATION**

## University of Michigan College of Engineering | Ann Arbor, MI

(Aug 2020 - May 2024)

B.S.E in Computer Science

- · GPA: 4.00 / 4.00
- · Relevant Coursework: Data Structures and Algorithms, Foundations of Computer Science, Introduction to Computer Organization, Discrete Math, Linear Algebra.

## Novi High School | Novi, MI

(Graduation: May 2020)

· GPA: 4.00 / 4.00

#### WORK EXPERIENCE

### Data Engineering Intern | Atomic, San Francisco, CA

(Jun 2021 - Aug 2021)

Butter Payments, one of Atomic's portfolio companies

- · Designed and developed workflow orchestration and data systems to automate the team's production code.
- · Built ETL flows in Python converting incoming raw data into standard tables, optimizing the effectiveness of our machine learning model.
- $\cdot$  Inspected 32 million rows of raw data using SQL queries for previously unexplored data to use in solving ambiguous problems.

#### Introductory Programming Teacher | NCCAE, Novi, MI

(Jun 2020 - Aug 2020)

NCCAE is a non-profit organization that provides educational services to children and teens

- · Evaluated prior knowledge and devised a curriculum for students to learn basic Python skills.
- · Instructed an eight-week course on Python, resulting in the students' abilities to develop retro games from scratch.

## RESEARCH EXPERIENCE

#### Query Optimization Researcher | Ann Arbor, MI

(Aug 2021 - Present)

· Design and run experiments to test the run-time efficiency of different variations of SQL queries.

## Windsor Regional Hospital Technician Assistant | Windsor, ON

(Jul 2019 - Aug 2019)

· Analyzed 200+ anal canal cancer patient's data for relationships and patterns

#### PERSONAL PROJECTS

#### Two-Player Tetris

(Jul 2019 - Aug 2019)

- $\cdot$  Conceptualized and developed a multiplayer cooperative Tetris game with Python.
- · Two players play on the same board, with each player's blocks contributing equally. Players must communicate and be effective in cooperation in order to find a balance of each new piece.

#### TECHNICAL LANGUAGES AND SKILLS

Languages C++, Java, Python, HTML5, CSS, SQL

Technologies Unity, MATLAB, AWS

### **ACTIVITIES**

## ${\bf MedLaunch \mid University \ of \ Michigan}$

(Sep 2020 - Present)

Working on yearly biomedical engineering related projects

· Developed virtual reality games in Unity to help stroke patients exercise their limbs with less effort.

## VOID Consulting | University of Michigan

(Sep 2020 - Present)

Design and create websites for client companies, mainly local businesses near Ann Arbor

· Remodelled a website using HTML/CSS/PHP for Independence Rides, a business that offers dignified transportation to the elderly.

## NHacks Head of Sponsorship | Novi High School

(Sep 2019 - Aug 2020)

Michigan's first high school hackathon, with more than 150 attendees

- · Managed sponsorship proposals and sponsor relations
- · Organized a completely virtual hackathon in order to maintain and built outside interest.