

JUSTIN SHIQI LIU

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EDUCATION

University of Michigan College of Engineering | Ann Arbor, MI (Aug 2020 - May 2024)
B.S.E in Computer Science, Minor in Mathematics

- 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 (Remote) (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.
- 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 | MIPL, Ann Arbor, MI (Sep 2021 - Present)
· Design and run experiments to test the run-time efficiency of different variations of SQL queries.

Technician Assistant | Windsor Regional Hospital, Windsor, ON (Jul 2019 - Aug 2019)
· Analyzed 200+ anal canal cancer patient's data for relationships and patterns.

PERSONAL PROJECTS

Two-Player Tetris (Jul 2020 - Aug 2020)
· Conceptualized and developed a multiplayer cooperative Tetris game with Python (Pygame).
· 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, Airflow

ACTIVITIES

Development Lead | VOID Tech Consulting, University of Michigan (Sep 2020 - Present)
· Delegated tasks to the project team for remodelling local businesses' websites using HTML/CSS/PHP.
· Collaborated with clients, designers, and project managers to deliver promising results.
· Facilitated technical educational sessions for new developers.

Designer | MedLaunch, 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.

Head of Sponsorship | NHacks, 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.