Jaylen Sze

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Education

University of Toronto **GPA: 3.97 / 4.0** | Toronto, ON

Bachelor of Science in Computer Science *Expected May 2029*

Relevant Coursework: Python Programming I, Python Programming II, Designing Systems for Real World Problems (Completed), Software Design (Expected Fall 2026), Computer Organization, Software Tools and Systems Programming, Data Structures and Analysis, Introduction to Machine Learning (Expected Winter 2027)

Technical Skills

Languages: Java (Advanced), Python (Advanced), C++ (Advanced), JavaScript (Int.), HTML/CSS (Int.), R (Int.)
Developer Tools: PyCharm (Advanced), CLion (Advanced), IntelliJ (Advanced), VS Code (Beginner), Git (Int.)
Frameworks & APIs: Flask (Beginner), PyGame (Beginner), DeepFace (Beginner), Gemini API (Int.)

Projects

Wikipedia Racing | *Python, Graph Theory, NetworkX* | Course Project Mar. 2026

- Finds **fastest path** between two Wikipedia pages using **Breadth-First Search** graph traversal algorithm
- Parses data of over **1 Million** Wikipedia page links from a CSV file, filtering out links to unused pages
- Uses **NetworkX** to visualize shortest paths between pages, and different subsets of the larger graph

Mic Drop Madness | *Python, PyGame, Gemini API* | Lockdown 2025 High School Hackathon Apr. 2025

- Built a real-time karaoke battle game in **PyGame** that lets two or more players compete head-to-head
- Analyzed live audio input against the original track using **Python** to generate a 0–10 performance score
- Fed audio and scoring data to the **Gemini API** to deliver personalized, actionable feedback for improving singing
- **Won 2nd place** overall (Lockdown 2025 High School Hackathon) out of **23** teams

FacePalm | *Python, Flask, Gemini API, DeepFace* | Scrapyard 2025 High School Hackathon Mar. 2025

- Built a full-stack **Flask web app** that reads a user's facial expression and generates an AI response in real time
- Added **DeepFace** emotion-detection output to **Gemini API** prompt to generate tailored responses based on mood
- **Won 2nd place overall** (Scrapyard 2025 High School Hackathon) out of **29** teams

Leadership

A. Y. Jackson S. S. Math Club Founder and Head Sep. 2023 – Jun. 2025

- Founded the club and grew club and contest **participation 2x** by introducing tiered-difficulty lessons, creating videos for the school announcements and promoting using social media
- Introduced **2 new math competitions** to the school, expanding the contests available to students
- Taught weekly lessons to club members, presenting **27** total lessons and over **100** problems

A. Y. Jackson S. S. Varsity Ultimate Frisbee Team Captain Sep. 2021 – May 2025

- Led the team to a **6th-place** finish out of **41** teams in Ottawa and two **2nd-place** finishes at other tournaments
- Studied professional game footage to identify team weaknesses, then designed and ran targeted drills at practices
- Organized additional unofficial practices and captain's meetings to raise team-wide skill level and buy-in

Awards

2026 Innis Later Life Scholarship Oct. 2026

- Scholarship given to Innis College student for outstanding academic performance

University of Toronto Dean's List Scholar May 2026

- Awarded for GPA above 3.5 for the 2025-2026 Academic Year

2026 MAA Putnam Competition Participant Dec. 2025

- Placed **1,822 out of 4,335** as a **freshman** on the largest Math Competition for Undergraduate Students

A. Y. Jackson S. S. Governor General's Academic Medal Jun. 2025

- Awarded for **highest academic average** out of **200+ students** in the 2025 graduating class

2025 Euclid Math Competition School Champion Apr. 2025

- Placed **1,524 out of 27,092** (**top 6%**) in **Canada's largest** math competition for high school students

2024 Canadian Computing Competition Senior Division Honour Roll Feb. 2024

- Placed **187 out of 3,947** (**top 5%**) in **Canada's largest** coding competition for high school students