Max Liu

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Education

University of Toronto Sept 2022 – June 2027
Bachelor of Science in Computer Science; Bachelor of Science in Mathematics CGPA: 3.58
Relevant Coursework: Software Design, Databases, Machine Learning, Algorithm Design, Information Security, Systems Programming

Experience

Saige May 2025 – Present
Mississauga, ON (Remote)

- Designed an event-driven batch compute pipeline for proformas, introducing an API to dispatch jobs to AWS SQS and a persistent Python worker to process city-scale workloads reliably and at scale
- Built a scheduled updates service that runs daily jobs for saved searches, generates PDF reports, stores artifacts in Amazon S3, and sends user notifications, with management endpoints and run history
- Developed a scalable, asynchronous batch processing system in Python for generating complex real estate financial proformas, cutting total generation time from 30 seconds to under a second
- Migrated the entire frontend from Material-UI v4 to v5, refactoring over 100+ components to improve performance, reduce technical debt, and enable modern features

University of Toronto (Teaching assistant – Theory of Computation) Aug 2024 – Dec 2024
Mississauga, ON (On-site)

- Led weekly office hours, teaching algorithm correctness, recurrence equations, and formal languages
- Collaborated with the instructor to proctor exams, moderate online discussions, and grade assignments

Savi Finance Sept 2024 – Dec 2024
Toronto, ON (Remote)

- Developed an AI chatbot sidebar using React, integrating seamlessly into web and mobile interfaces
- Integrated the front-end application with OpenAI API for conversational AI, leveraging GraphQL to fetch information and connecting with MongoDB for data storage

Projects

NoteFlip | *FastAPI, React Native, Next.js, PostgreSQL* Feb 2024 – Present

- Developed a cross-platform educational app that converts handwritten notes into interactive flash cards
- Designed a scalable backend using FastAPI and PostgreSQL, integrating Google Cloud Vision for OCR and OpenAI's API for content processing
- Built dual-platform frontend interfaces with React Native for mobile and Next.js for web, ensuring seamless user experience

TextWolfram | *React, Python, Twilio, REST APIs* Apr 2023

- Developed a text messaging conversation service that gives fast responses to technical questions
- Used WolframAlpha Conversational API for generating accurate human-like responses within two seconds of a message, Twilio webhooks with ngrok for deploying to a live server
- Designed an informative user-friendly website using the React framework

Technical Skills

Languages: JavaScript/TypeScript, Python, Java, C/C++, SQL
Frameworks & Libraries: React, React Native, Next.js, Node.js, FastAPI, Tailwind CSS
Databases & Tools: Git, GitHub Actions, Docker, PostgreSQL, MongoDB, Vercel, AWS (SQS, S3)

UNIVERSITY OF TORONTO

Complete Academic History

Max Liu **Accurate as of:** Aug 14, 2025

This is not an official transcript.

Registration History

2022 Fall-2025 Winter: University of Toronto Mississauga

University of Toronto Mississauga

2023 Winter - Dean's List Scholar 2024 Winter - Dean's List Scholar

2025 Winter - Dean's List Scholar

2022 Fall - First Year Studies in Computer Sc. Math.& Stats

Sessional GPA 4.00 Cumulative GPA 4.00

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
ANT102H5	Introduction to Sociocultural and Linguistic Anthropology	0.50		CR	C+
CSC108H5	Introduction to Computer Programming	0.50	92	A+	C+
EDS100H5	Introduction to Education Studies	0.50	86	A	B
MAT102H5	Introduction to Mathematical Proofs	0.50	96	A+	B-
MAT137Y5	Calculus	1.00		IPR	

Credits Earned: 2.00

2023 Winter - First Year Studies in Computer Sc. Math.& Stats

Sessional GPA 3.78 Annual GPA 3.86 Cumulative GPA 3.86

Status: In good standing

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC148H5	Introduction to Computer Science	0.50	87	A	C+
ISP100H5	Writing for University and Beyond	0.50	94	A+	B
MAT137Y5	Calculus	1.00	83	A-	C
MAT240H5	Algebra I	0.50	78	B+	C+
PHL245H5	Modern Symbolic Logic	0.50	93	A+	*

Credits Earned: 3.00

2023 Summer - Bachelor's Degree Program

Sessional GPA 2.30 Cumulative GPA 3.70

Status: In good standing

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
POL101H1	Real World of Politics: Intro	0.50		CR	B-
STA256H5	Probability and Statistics I	0.50	68	C+	C-

Credits Earned: 1.00

2023 Fall - Bachelor's Degree Program

Sessional GPA 3.82 Cumulative GPA 3.74

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC207H5	Software Design	0.50	82	A-	B+
CSC236H5	Introduction to the Theory of Computation	0.50	96	A+	C+
MAT202H5	Introduction to Discrete Mathematics	0.50	88	A	C+
MAT232H5	Calculus of Several Variables	0.50	84	A-	C+
MAT247H5	Algebra II	0.50	81	A-	B

Credits Earned: 2.50

2024 Winter - Bachelor's Degree Program

Sessional GPA 3.42 Annual GPA 3.62 Cumulative GPA 3.66

Status: In good standing

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC209H5	Software Tools and Systems Programming	0.50	75	B	C
CSC258H1	Computer Organization	0.50	80	A-	B
CSC263H5	Data Structures and Analysis	0.50	83	A-	C+
MAT236H5	Vector Calculus	0.50	86	A	B-
MAT244H5	Differential Equations I	0.50	70	B-	C+

Credits Earned: 2.50

2024 Summer - Bachelor's Degree Program

Sessional GPA 3.53 Cumulative GPA 3.64

Status: In good standing

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC311H1	Intro Machine Learning	0.50	77	B+	B+
MAT301H5	Groups and Symmetries	0.50	77	B+	C+
MAT344H5	Introduction to Combinatorics	0.50	91	A+	C+

Credits Earned: 1.50

2024 Fall - Bachelor's Degree Program

Sessional GPA 3.88 Cumulative GPA 3.69

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC301H1	Intro to Soft Eng	0.50	89	A	A-
CSC347H5	Introduction to Information Security	0.50	85	A	B+
CSC373H5	Algorithm Design and Analysis	0.50	84	A-	B
PHL200H5	Ancient Philosophy	0.50	83	A-	*
PHL240H5	Minds and Machines	0.50	99	A+	B-

Credits Earned: 2.50

2025 Winter - Bachelor's Degree Program

Sessional GPA 2.83 Annual GPA 3.41 Cumulative GPA 3.58

Status: In good standing

Crs Code	Title	Wgt	Mrk	Grd	CrsAvg
CSC343H5	Introduction to Databases	0.50	58	D+	C+
CSC363H5	Computational Complexity and Computability	0.50	85	A	C+
PHL220H5	Existentialism	0.50		CR	B-
PHL285H5	Philosophy of Art	0.50	87	A	B-
PHL333H5	Epistemology	0.50	66	C	C+

Credits Earned: 2.50

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