

# Sacha Goldman

## Location

Toronto, Canada

## Online

### Email

[sacha@sachagoldman.com](mailto:sacha@sachagoldman.com)

### Website

[sachagoldman.com](http://sachagoldman.com)

### Github

[SachaGoldman](https://github.com/SachaGoldman)

## Education

**MSc in Mathematics** [University of Toronto](#)

September 2023 - August 2024

Interested in algebraic topology, differential topology, and geometry.

**BSc in Mathematics and Computer Science** [University of Toronto](#)

September 2019 - June 2023

Focused on math and applications to computer science. Studying algebra, differential topology, algebraic topology, differential geometry, machine learning, and quantum computing.

## Research

**NSERC Undergraduate Summer Research Award** [The Torelli Lie Algebra](#)

May 2023 - September 2023

Working with Alexander Kupers and Daniel Litt on researching the Torelli Lie algebra.

**Independent Research** [Quantum Convolutional Neural Networks](#)

January 2022 - November 2022

Worked Nathan Wiebe creating a quantum analogue of convolutional neural networks.

## Scholarships

**Raptors Foundation In-Course Scholarship** [New College](#)

2023

**In Course Scholarship** [New College](#)

2022

**In Course Scholarship** [New College](#)

2021

**William and Shirley Reed Scholarship** [VSB](#)

2019

## Teaching

**MAT186 Teaching Assistant** [University of Toronto](#)

September 2023 - December -2023

Running tutorials and grading for a differential and integral calculus course.

**MAT367 Tutor** [University of Toronto](#)

January 2023 - May -2023

Tutored a student in introductory differential topology.

**CSC236 Teaching Assistant** [University of Toronto](#)

September 2021 - December -2021

Running tutorials and grading for a course introducing mathematics for computer science.

## Employment

**Software Engineer Intern** [Apple](#)

May 2022 - August 2022

Worked on the team architecting Apple Media Apps solving unique technical challenges.

**Software Developer Intern** [SSENSE](#)

May 2021 - August 2021

Worked on the iOS team facilitating a transition to the composable architecture and SwiftUI.

## Technical Proficiencies

Sage, Lean, Python, C,  $\text{\LaTeX}$ , Git, Shell