

# Ming Yin

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*PhD Student at Simon Fraser University*

## Education

- 2022–2026 PhD in Mathematics (Quantum Computing) **Simon Fraser University**  
Supervisor: Dr Nadish de Silva
- 2021–2022 Part III Systems Biology (MSci) **Trinity College, Cambridge**  
Grade: First Class (71.9/100)
- 2018–2021 BA (Hons) in Mathematics **Trinity College, Cambridge**  
Part II grade: Second Class, First Division
- 2010–2017 **Reading School, Reading**  
A levels: 5 A\* in Mathematics, Further Mathematics, Chemistry, Physics and German  
A in AS level Biology  
GCSEs: 11 A\*

## Research Experience

### Quantum Computing

Dec 2024 *Fast algorithms for classical specifications of stabiliser states and Clifford gates*  
With Nadish de Silva, Wilfred Salmon  
DOI: [10.22331/q-2025-01-08-1586](https://doi.org/10.22331/q-2025-01-08-1586) (*Quantum*)

July 2024 *Bases for optimising stabiliser decompositions of quantum states*  
With Nadish de Silva, Sergii Strelchuk  
DOI: [10.1088/2058-9565/ad53fc](https://doi.org/10.1088/2058-9565/ad53fc) (*Quantum Science and Technology*)

### 2021–2022 Systems Biology Project

*Mathematical Modelling of a Mitotic Spindle*

Supervised by Dr François Nédélec (Sainsbury Laboratory, University of Cambridge)

Programming in C++/Python, stochastic theory and computer simulations, genetic algorithms, artificial evolution

Grade: First Class (76/100)

### Reviewer

2024– *Physical Review Applied*

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## Teaching

### Teaching Assistant | Simon Fraser University

Spring 2025, Applied Calculus Workshop  
Fall 2024

Spring 2025, CMPT 476/MACM 476: Introduction to Quantum Algorithms  
2024

Fall 2023 Applied Calculus and Algebra Workshop

Spring 2023 MATH 242: Introduction to Analysis I

Fall 2022 Applied Calculus Workshop

### 2018–2020 Maths and English Tutor | Explore Learning

Tutoring children aged 4–14.

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## Leadership

### Sum 2023– Math Steward | Teaching Support Staff Union

Liaising between workers in the Math Department and union executives, organising, dealing with work-related complaints and grievances.

### Mathematics Graduate Caucus at SFU

Fall 2024 Secretary

Sum–Fall Vice President  
2023

### 2021–2022 Organiser | Video Game Music Concert

Leading a small ensemble of students, rehearsal scheduling and planning, multitasking and organisation.

### 2018–2022 Volunteer and Committee Member | Cambridge Nightline

Active listening, working long hours, delivering interactive talks to a large audience, training volunteers and giving feedback.

### 2019–2020 Undergraduate Representative | Faculty Board of Mathematics

Liaising and communicating ideas between students and Faculty Board members, showing initiative in pushing to implement suggestions, working to resolve disagreements among students and staff.

Recognition: Outstanding Student Contribution to Education Award, 2020

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## Skills and Extracurricular Activities

**Programming Languages** Python, Julia, Bash, C++, MATLAB, R, Java

**Human Languages** Mandarin Chinese (conversational), German (A level)

**Music** DipABRSM in Music Performance (Piano), Oboe Grade 8 (Distinction)