

Ming Yin

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

Nov 2023 **Accepted submission**

‘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)

Accepted into *Quantum Science and Technology*

Preprint

‘Fast algorithms for classical specifications of stabiliser states and Clifford gates’

With Nadish de Silva, Wilfred Salmon

arXiv:2311.10357

Submitted to *Quantum*

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)

Teaching

Teaching Assistant | Simon Fraser University

- Fall 2024 Applied Calculus Workshop
- Spring 2024 CMPT 476/981: Introduction to Quantum Algorithms
- 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

Adapting tutoring techniques to suit different ages (4–14), managing time while tutoring six children at once, communicating clearly with parents to discuss their child's progress.

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 2023 Vice President

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

Skills and Extracurricular Activities

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

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

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