

PERSONAL	<p>Website: mike-law.github.io Email: mike.law0616@gmail.com Languages: English (native), Cantonese (fluent), Mandarin (reading/listening only) Citizenship: Australia and Hong Kong</p>
RESEARCH EXPERIENCE	<p>2021, Australian National University (honors project) <i>Uniqueness of tangent flows in mean curvature flow</i>, supervised by Prof. Ben Andrews. My thesis details some recent progress in mean curvature flow, with a focus on geometric Łojasiewicz inequalities and uniqueness of blowup limits. [link to thesis]</p> <p>2020–21, Australian Mathematical Sciences Institute <i>Topological phases in quantum systems</i>, supervised by Dr. Thomas Quella. Using representation theoretic and computer algebraic tools, I looked at symmetry-protected topological phases in the q-deformed AKLT model. The results of this research are being prepared for publication. [link to report]</p> <p>2019–20, University of Melbourne <i>Label-noise generative adversarial networks</i>, supervised by Dr. Mingming Gong. I designed, implemented and experimented with image generation models using PyTorch. [link to report]</p>
EDUCATION	<p>2021, Australian National University, Canberra, Australia. Bachelor of Mathematical Sciences (Honors), GPA 7.00/7.00.</p> <p>2018–20, University of Melbourne, Melbourne, Australia. Bachelor of Science (Mathematics and Statistics), weighted average 94/100.</p> <p>2011–17, Sha Tin College, Hong Kong. IB Diploma Program, 45/45, valedictorian.</p>
ACADEMIC AWARDS	<p>2021, ANU Mathematical Sciences Institute Honors Scholarship Merit scholarship (value: AUD 5,000)</p> <p>2020, Dixson Prize Top scorer in third year pure mathematics (AUD 430)</p> <p>2019, Maurice H. Belz Prize in Statistics Top scorer in the subjects <i>Probability</i> and <i>Statistics</i> (AUD 410)</p> <p>2018 & 2020, University of Melbourne Dean's Honors Top 3% of students faculty-wide (ineligible for the 2019 award due to program transfer)</p> <p>2018–20, University of Melbourne Chancellor's Scholarship Merit scholarship (full tuition + AUD 10,000 p.a. for duration enrolled)</p>
TALKS	<p>Gauge Theory and Symplectic Geometry, ANU, 2021. <i>The Chern–Weil construction</i>. ANU MSI Honors Conference, 2021. <i>Uniqueness of tangent flows in mean curvature flow</i>. [slides] ANU MSI Honors Conference, 2021. <i>Singularities in the mean curvature flow</i>. [slides] AMSICConnect Student Conference, 2021. <i>Topological phases in quantum systems with quantum group symmetries</i>. [slides] University of Melbourne, 2020. <i>Label-noise robust twin auxiliary classifier GANs</i>. [slides]</p>
WORK AND VOLUNTEERING	<p>2021, Teaching Assistant, Australian National University. I tutored ~ 40 students per semester in MATH1005 (Discrete Mathematical Models) and MATH1013 (Mathematics and Applications 1). I gave weekly workshops and graded assignments.</p> <p>2018–20, Mentor, The Institute for Enquiring Minds. I volunteered to teach mathematics to high school students from financially disadvantaged backgrounds, after school on a one-to-one basis.</p>

2017–20, Tutor, self-employed.

I delivered over 600 hours of tutoring in math, physics and economics at high school level.

2018–19, Business Analyst Intern, SW Global Consulting Ltd.

I conducted due diligence to advise clients on investment decisions.

COMPUTER
SKILLS

Proficient: Python, L^AT_EX

Intermediate: C, Mathematica

Basic: Java, R & RStudio