

Curriculum Vitae

Ziye Lin

Master of Mathematics Candidate
Department of Statistics and Actuarial Science
University of Waterloo
Waterloo, ON, Canada

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Ziye Lin

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EDUCATION

University of Waterloo

Master of Mathematics, Biostatistics

Waterloo, ON, Canada

08/2025 (*Expected*)

- Supervisor: Changbao Wu
- GPA: 84/100
- Research focus: imputation-based approaches to causal inference
- Core courses: causal inference, probability theory, analysis of survival and longitudinal data
- Award: 2024 W.F. Forbes Entrance Award

University of Waterloo

Bachelor of Mathematics, Statistics

Waterloo, ON, Canada

08/2023

- GPA: 89/100
- Core courses: mathematical statistics, linear models, sampling and experimental design
- Award: 2020 President's Scholarship of Distinction

TEACHING DOSSIER

Teaching dossier available [online](#).

TEACHING EXPERIENCE

Tutorial Leader – [STAT 230 \(Probability\)](#)

Department of Statistics and Actuarial Science, University of Waterloo

Waterloo, ON, Canada

05/2025 – Present

- Deliver tutorial sessions to approximately 40-50 students
- Clarify concepts and review practice problems
- Interact with students to answer questions and provide support

Guest Lecturer – [STAT 231 \(Statistics\)](#)

Department of Statistics and Actuarial Science, University of Waterloo

Waterloo, ON, Canada

21/03/2025

- Delivered a guest lecture to a class of 28 students
- Covered Gaussian response models and model diagnostics
- View the [lecture notes](#)
- Recorded lecture available upon request

Grader – Undergraduate Courses

Department of Statistics and Actuarial Science, University of Waterloo

Waterloo, ON, Canada

09/2024 – Present

- Provide written feedback to support students' learning
- Grade assignments and exams:
 - [STAT 230 \(Probability\)](#) (09/2024 – 12/2024 and 05/2025 – Present)
 - [STAT 330 \(Mathematical Statistics\)](#) (09/2024 – 04/2025)
 - [STAT 331 \(Applied Linear Models\)](#) (05/2025 – Present)
 - [STAT 332 \(Sampling and Experimental Design\)](#) (01/2025 – 04/2025)

Math Tutor – [MATH 237 \(Calculus III for Honours Mathematics\)](#)

Mathematics Tutoring Centre, University of Waterloo

Waterloo, ON, Canada

01/2023 – 04/2023

- Conducted one-on-one in-person tutoring sessions with students
- Clarified course material and provided strategic hints for assignments

PROFESSIONAL DEVELOPMENT

Fundamentals of University Teaching Program (In Progress)

Waterloo, ON, Canada

Centre for Teaching Excellence, University of Waterloo

01/2025 – Present

- Participate in a professional development program for post-secondary teaching
- Complete two peer-reviewed teaching sessions, focusing on lesson delivery and feedback
- Recognized across Canadian universities as a foundational teaching preparation credential

MATH 900 – University Mathematics Teaching Techniques

Waterloo, ON, Canada

Faculty of Mathematics, University of Waterloo

01/2025 – 04/2025

- Completed formal training in university-level mathematics instruction
- Studied course design, lecture effectiveness, assessment strategies, and student engagement
- Delivered three peer-reviewed teaching sessions on probability theory and statistical modeling
- Delivered a guest lecture to a live undergraduate class: [STAT 231 – Statistics](#)
- Designed an assignment question with marking rubric
- Authored a formal teaching statement
- By completion, qualified to be appointed as a graduate instructor in the Department of Statistics and Actuarial Science for undergraduate courses

RESEARCH AND PROJECTS

Imputation-Based Approaches to Causal Inference (In Progress)

Waterloo, ON, Canada

Master's Research Paper, University of Waterloo

05/2025 – Present

Supervisor: Changbao Wu

- Exploring imputation approaches in causal inference
- Reviewing Propensity Scores, Inverse Probability Weighted Estimators, AIPWE
- Conducting simulation and empirical study on relevant imputation methods (in R)
- Comparing performances of imputation-based estimators to non-imputation-based estimators
- Summarizing results in a formal essay to fulfill master's degree requirement

Modeling the Observed Radial Velocity of NGC 7531 Galaxy

Waterloo, ON, Canada

[STAT 444 \(Advanced Regression\) Project](#), University of Waterloo

07/2023 – 08/2023

- Modeled the association between the observed radial velocity and the position in the sky from which it is observed for NGC 7531
- Applied ordinary least squares, regularized least squares with ℓ^2 -norm penalty, cubic polynomials, and cubic B-splines (in R)
- Assessed model performances by AIC, training error, and estimated mean prediction squared error via cross-validation
- Source Dataset: [The Elements of Statistical Learning](#) → Data → Galaxy
- [Project Report](#) | [Appendix \(Code\)](#)

SKILLS AND LANGUAGES

- Programming: R, Python, SQL, SAS
- Typesetting: \LaTeX , Markdown
- Language: English (fluent); Mandarin (native) and Cantonese (native)
- Personal Hobbies: Piano ([ABRSM](#) GRADE 8), Swimming, Cooking