

Ryan Shi

ryancy.shi@mail.utoronto.ca | [linkedin.com/in/ryan-shi-a7b096215](https://www.linkedin.com/in/ryan-shi-a7b096215) | github.com/ryancys1234

EDUCATION

University of Toronto

Toronto, ON

BSc: Data Science

Sep. 2021 – Jun. 2025

- **Courses:** Data Science I & II; Algorithm Design, Analysis & Complexity; Methods of Data Analysis I & II; Multivariable Calculus with Proofs; From Genes to Organisms; Software Design
- **Awards:** University of Toronto Scholar, J. S. Maclean Scholarship, Dean's List

EXPERIENCE

Teaching Assistant

Sep. 2023 – Present

Department of Mathematics, University of Toronto

Toronto, ON

- Involved with first year calculus courses in the Faculties of Applied Science and Engineering, Arts and Science
- Led tutorial sections of up to 70 people, held office hours, invigilated exams, and marked assignments and exams

Textbook Design Assistant

May 2023 – Aug. 2023

Department of Mathematics, University of Toronto

Toronto, ON

- Edited textbook content and materials for a proof-based multivariable calculus course
- Created homework questions using Perl, LaTeX on WeBWorK

Research Student

Oct. 2022 – Mar. 2023

Azrieli Adult Neurodevelopmental Center, Center of Addiction and Mental Health

Toronto, ON

- Cleaned EEG data using MATLAB for a project using PAS-TMS to assess neuroplasticity in adults with ASD and identify potential biomarkers of ASD symptoms
- Created data files to be used in the project's analysis and results

COURSE PROJECTS

Introduction to Machine Learning | Python, NumPy, Matplotlib, PyTorch

Jul. 2023 – Aug. 2023

- Extended an item response theory model for a matrix completion problem in the context of personalized education

Methods of Data Analysis I | R

May 2023 – Jun. 2023

- Processed data, performed exploratory data analysis, and compared regression models to determine significant predictors of hypertension in individuals with diabetes

Data Science I | Python, pandas, NumPy, Matplotlib

Mar. 2023 – Apr. 2023

- Created an NLP logistic regression model to predict sentiments on Twitter trained on tweet metadata

Software Design | Java, Git

Sep. 2022 – Dec. 2022

- Created a lightweight Java-based social application using clean architecture and object-oriented programming paradigms

Introduction to Statistical Reasoning | R

Oct. 2021 – Dec. 2021

- Explored patterns, tested hypotheses, and communicated findings using RStudio for a project on short stories sponsored by the Faculty of Law and Department of English

TECHNICAL SKILLS

Languages: Java, Python, R, C, Bash, LaTeX, SQL, Perl, HTML/CSS

Developer Tools: Git/GitHub, VS Code, RStudio, Jupyter Notebook, Google Colab, MATLAB

Libraries: Tidyverse, pandas, NumPy, SciPy, Matplotlib, sklearn, PyTorch

EXTRACURRICULARS

Licentiate & Associate Diplomas of the Royal Conservatory in Piano, Performer Aug. 2021 / Apr. 2019