

Ryan Shi

[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 Specialist, Bioinformatics and Computational Biology Specialist

Sep 2021 – June 2025

- **Courses:** Data Science I & II, Data Structures & Analysis, Methods of Data Analysis I & II, Multivariable Calculus with Proofs, Software Design
- **Awards:** University of Toronto Scholar, J. S. Maclean Scholarship

EXPERIENCE

Teaching Assistant

Sep. 2023 – Present

Department of Mathematics, University of Toronto

Toronto, ON

- Involved with first year calculus courses in the Faculty of Applied Science and Engineering, Faculty of Arts and Science
- Led tutorial sections, 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 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 plasticity in adults with ASD and identify potential biomarkers of ASD symptoms
- Created data files to be used in the project's data analysis and results

COURSE PROJECTS

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

May 2023 – Aug 2023

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

Data Science I | *Python, pandas, NumPy, Matplotlib*

Jan 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*

Sep 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, L^AT_EX, Perl, HTML/CSS

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

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

EXTRACURRICULARS

Licentiate & Associate Diplomas of the Royal Conservatory in Piano, Performer