JSC370 / JSC470: Data Science II and III

- Instructor: [David Duvenaud](#)
- Teaching Assistant: [harsh Panchal](#)
- Email: duvenaud@cs.toronto.edu, please put "JSC370" or "JSC470" in the title.
- Location: Zoom (see Quercus for details)
- Time: Tuesday and Thursdays, 3-5pm
- Course Forum: [Discourse](#)

Assessment Title	Percent (%)	Date(s)
A1	19	2021-02-01
A2	19	2021-02-15
A3	19	2021-03-01
A4	19	2021-03-15
A5	19	2021-04-01
A6	5	2021-04-08

Assignments
Assignments are due by 23:59 on the due date. Late penalty for assignments: 10% will be deducted from assignments each day after the due date (rounding up). Assignments won't be accepted after 96 hours after the due date.

Remarking
Remarking must be requested within 2 weeks of getting the marked assignment back.

Missed assignment policy
Missed assignments will get a grade of zero unless arrangements have been made before the due date.

Office hours
Wednesdays 4pm-5pm by same zoom link as lectures.

Communication for Special Circumstances:
If you find yourself in a situation that requires you to submit your assignment after the deadline you should inform me via email prior to the due date as soon as possible. Be pre-emptive. Emails explaining late assignments near or after the deadline will not be considered generously.

Collaboration policy: Assignments 1-5 can be completed in groups of 2-3. Assignment 6 must be completed individually.

Programming Assignments: A typical assignment will require you to write (or modify) and use some code that implements a simple version of a learning procedure that has recently been covered in the course. You will have to submit a brief report that describes the results you obtained. That report must include everything that will be assessed. So outputs from the code, like plots or values, must be included in the write-up. Markers will not be expected to run your code. Marking concerns: Any requests to have marked work re-evaluated must be made in writing within one week of the date the work was returned. The request must contain a justification for consideration.

Academic integrity
You are responsible for knowing the content of the University of Toronto's Code of Behaviour on Academic Matters. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact your instructor.

Accessibility needs
The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom, or course materials, please contact Accessibility Services as soon as possible:
accessibility.services@utoronto.ca or http://accessibility.utoronto.ca

Tentative list of topics:
Confounding, censoring, causality, and the do-calculus
Latent variable models + not-missing-at-random data
Decision theory and Goodhart's law
Natural Language Processing
Using large off-the-shelf models (e.g. transformers)
Outlier detection
Time Series Models + Validation
Reproducibility and version control for data
Probabilistic models for dealing with missing data
Generative models
What can go wrong / things to look out for
Bayesian approaches