

Title: Home URL: save_as: index.html

We are a group of motivated Canadian Public Servants who want to get our feet wet with Bayesian analysis and probabilistic programming. This website will serve as an easily-accessible repository of course material, syllabus, references, etc.

Bayesian Statistics

Here's a short-ish explanatory video of Bayesian analysis:

Bayesian analysis is particularly useful when:

- You have prior beliefs about unknown model parameters or explicit information about data generation — i.e., useful info you want to incorporate
- You have few data or many unknown model parameters and it is hard to get an accurate result with your data alone (without the added structure or information)
- You want to capture the uncertainty about your result — how sure or unsure your model is — instead of only a single “best” result

Course Plan

[Tentative syllabus](#)

Based on multiple suggestions, we'll be following John Krushke's [Doing Bayesian Data Analysis: A Tutorial with R, JAGS, and Stan \(2nd edition\)](#) book.

This study group will meet weekly, and consist of two parts:

1. **Reading the chapters individually** before each session, and
2. **Meeting for 1h every week** to go through exercises together.

We might lump some a few of the introductory chapters for the first weeks. We'll end up using both Python and R.

Logistics

The plan is to webcam over WebEx, and perform directed sessions together as a study group. We are also looking into a partnership with the [Canadian School of Public Service's Digital Academy](#) for a boardroom to meet in person. This section will be updated accordingly.