



SAVE THE DATE – SOCIAL AND TALK ORGANIZED BY THE STATISTICAL SOCIETY OF OTTAWA (SSO)

Join SSO for the 2021 Fall SSocial to hear
a stimulating talk and to have some fun!

You have heard of estimation for numbers, but have you ever heard of estimating impacts on language?

Come and be amazed by the power of statistical estimation in the context of text analytics. Our invited speaker, Dave Campbell (Carleton University) will give a talk about how to test covariate effects on the language used to describe beer flavours in text reviews of Canadian beers.

After the talk, stay for the social part of the event with SSO members and event participants. We will start with a guessing game to test your statistical image recognition and inference skills. Afterwards, there will be an opportunity to socialize and network. Catch up with old friends and make new ones!

The event is free to attend!

When: Wednesday, November 10, 2021, 7:00 pm – 8:30 pm

Where: Zoom virtual meeting ([Link](#) in full below)

Tentative agenda:

- Introduction (5 min)
- Talk (30 min)
- Q & A (10 min)
- Icebreaker game (15 min)
- Social & networking (30 min)



Title and abstract of the presentation:

Testing Covariate Effects for Differences in Text Reviews of Canadian Beers

Dave Campbell and Gabriel Phelan, Carleton University and Simon Fraser University, Canada

Text provides rich opportunities for respondents to provide data unbounded by numeric or categorical constraints. Although rich in information, the unstructured nature of text data documents complicates analysis and inference. In this talk we consider product reviews for Canadian beers. The reviews are augmented by covariates such as geography and beer style. Given the rationality of ingredient production, there should be differences in geography induced beer flavours. Formally we wish to produce point and interval estimates for covariate effects on the language used to describe flavours. This talk showcases non-negative matrix factorization with anchor words to provide a deterministic conversion from text to topic. Permutation tests are then used for estimating effect sizes and hypothesis testing.

RSVP is requested/appreciated but not required. sso.ottawa.canada@gmail.com

<https://us02web.zoom.us/j/83842035364?pwd=Ums1bE9lQXJyZkJPcmIhalJQWXPzd09>