**CANSSI Saskatchewan**

**Health Science Collaborating Centre**

**Winter 2022 Webinar Series**

**Thursday, January 27**

**10 – 11 am Central time**

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**Boosting Learning of Censored Survival Data**

**ABSTRACT**

Survival data frequently arise from cancer research, biomedical studies, and clinical trials. Survival analysis has attracted extensive research interests in the past five decades. Numerous modeling strategies and inferential procedures have been developed in the literature. In this talk, I will start with a brief introductory overview of classical survival analysis which centers around statistical inference, and then discuss a boosting method which focuses on prediction. While boosting methods have been well known in the field of machine learning, they have also been broadly discussed in the statistical community for various settings, especially for cases with complete data. This talk concerns survival data which typically involve censored responses. Three adjusted loss functions are proposed to address the effects due to right-censored responses where no specific model is imposed, and an unbiased boosting estimation method is developed. Theoretical results, including consistency and convergence, are established. Numerical studies demonstrate the promising finite sample performance of the proposed method.

*Zoom meeting ID :* ***507 688 3859***

*Passcode: 12345678*

*Everyone is welcome!*