PIPGES · WEBINARS

JUN · 25
2021

02:00 PM

The link will be available on the day of the event at:

https://tiny.one/wujing

ONLINE UPDATING OF SURVIVAL ANALYSIS

When large amounts of survival data arrive in streams, conventional estimation methods become computationally infeasible since they require access to all observations at each accumulation point. We develop online updating methods for carrying out survival analysis under the Cox proportional hazards model in an online-update framework. Our methods are also applicable with time-dependent covariates. Specifically, we propose online-updating estimators as well as their standard errors for both the regression coefficients and the baseline hazard function. Extensive simulation studies are conducted to investigate the empirical performance of the proposed estimators. A large colon cancer data set from the Surveillance, Epidemiology, and End Results (SEER) program and a large venture capital (VC) data set with time-dependent covariates are analyzed to demonstrate the utility of the proposed methodologies.

SPEAKER
Jing Wu · University of Rhode Island

BIO
Jing Wu is an assistant professor at the University of Rhode Island, USA. She received her Ph.D. in Statistics from the University of Connecticut, USA. Her research interests primarily lie in missing data, big data, survival, and longitudinal data. Dr. Wu has published research articles in Journal of Computational and Graphical Statistics, Statistics in Medicine, Statistica Sinica, Technometrics, JAMA Oncology, and Journal of Clinical Oncology, among others.

Interinstitutional Graduate Program in Statistics (PIPGES) of Federal University of São Carlos with University of São Paulo promotes seminars groups (temporarily webinars, due to pandemic issues) of researches involving Probability, Statistics, Machine Learning etc. Our interest, among other things, is to stimulate the sharing of knowledge, as well as the connection between members of the program and researchers in other institutions.

Organizer
Michel H. Montoril, Department of Statistics,
Federal University of São Carlos.

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