Wiener Biometrische Sektion
der Internationalen Biometrischen Gesellschaft
Region Österreich - Schweiz

http://www.meduniwien.ac.at/wbs/

Liebes Mitglied der Wiener Biometrischen Sektion!
Ich freue mich, Ihnen einen weiteren Vortrag der Wiener Biometrischen Sektion ankündigen zu können.
(bitte beachten Sie, der Vortrag ist bereits heute in einer Woche).
Mit freundlichen Grüßen
Gerhard Svolba

Biometrischen Kolloquium

am Donnerstag, dem 12. April 2012 um 16:00 Uhr (s.t.)

im Seminarraum (Ebene 3, Raum 88.03.513) des
Zentrums für Medizinische Statistik, Informatik und Intelligente Systeme (CeMSIIS) der Medizinischen Universität Wien
Spitalgasse 23, 1090 Wien
(Plan siehe http://www.muw.ac.at/cemsiis/allgemeines/anschrift/)

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Semiparametric Variable Importance Estimation: machine learning and causal inference for estimating the relative "importance" of many competing predictors

Alan Hubbard (co-authors M. Cohen, UCSF; A. Decker, UCB; I. Diaz, UCB; M. Kutcher, UCSF; M. van der laan, UCB)

As complex high dimensional, longitudinal data becomes more routinely gathered on patients in hospital or clinical settings, so have statistical techniques with the emphasis to use such data to predict outcomes, and find explanatory patterns among such data. Often the underlying implied data-generated models from such procedures put arbitrary constraints on the underlying data- generating distribution, whereas the "true" statistical model has few constraints (semiparametric model). Often when data-adaptive algorithms have been used, researchers have interpreted the implied importance of variables from the form of final model; these measures of importance, however, can have unpredictable sampling distributional properties. We discuss estimation in a semiparametric model of asymptotically linear parameters. We define our parameters in the context of graphs and thus the variable importance inspired by parameters related to theoretical interventions on a set of implied nonparametric structural equation models. The approach used is targeted maximum likelihood estimation and superLearning. We demonstrate this methodology on medical informatic data, specifically time- dependent prognostic indicators of survival (and other clinical outcomes) among a group of severe trauma patients, based on high dimensional, time-dependent data.