BIOSTATISTICS SEMINAR



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Confounding-Robust Policy Improvement

Since observational data no matter how rich will have some unobserved confounding, methods for individualized decision making that assume unconfoundedness (or other unverifiable assumptions that never hold exactly in practice) can intervene where not necessary and lead to harm and therefore may be unusable in practice. We instead propose a new minimax-regret formulation for policy learning, prove that the policy we get from this is guaranteed to improve on existing standards of care, and develop efficient optimization algorithms to find this policy. A personalized medicine application demonstrates the power of our approach and its safety compared to previous ones.

Thursday February 28, 2019 3:30 pm - 4:30 pm Blue Cross and Blue Shield of North Carolina Foundation Auditorium

