Title:

Challenges with Covariate Shift: How to characterize and mitigate it optimally?

Abstract:

In many modern uses of predictive methods, there can be shifts between the distributional properties of training data compared to the test data. Such mismatches can cause dramatic reductions in accuracy that remain mysterious. How to find practical procedures that mitigate such effects in an optimal way? In this talk, we discuss the fundamental limits of problems with covariate shift, and simple procedures that achieve these fundamental limits.

Based on joint work with: Cong Ma, Reese Pathak and Lin Xiao.