Masterclass Syllabus

Lecture 1, Monday, 9:00am

Background and Preliminaries

What is machine learning?

An overview of several techniques

How does this fit in with economics?

What can we learn from machine learning?

Lecture 2, Tuesday, 9:00am

Applications of Machine Learning in Economics

BLP-Lasso

(https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2700775)

Random Projection with High-dimensional Choice Sets

(http://www.its.caltech.edu/~mshum/papers/rpmc.pdf)

Lecture 3, Tuesday, 2:00pm

Heterogeneous Models

Heterogeneous Treatment Effects ala Athey

Moment Forests

(https://sites.wustl.edu/stephenpryan/items/classification-trees-for-heterogeneous-moment-based-models/)