OPRE7343 - Modern Machine Learning Methods

OPRE 7343 Modern Machine Learning Methods (3 semester credit hours) The increasing availability of data provides firms substantial opportunities to leverage modern machine learning methods to inform decision making. This course provides a rigorous introduction to the most commonly used machine learning methods. Emphasis will be on understanding the mathematical and technical aspects behind the algorithms, but students will also implement some of the algorithms (in a programming language of their choice) to gain hands-on experience in applying the learnt methods on real datasets. Topics include classification and regression, clustering, ensemble learning, dimensionality reduction, and deep learning. Instructor consent required. (3-0)