UPDATED DEADLINES

Group Papers (30%): March 22: Final Draft Due (optional)

March 29: Final Paper Due

4 Assignments (30%): Feb 8: Assignment No. 1 (5%)

March 8: Assignment No. 2/3 (10%)
March 29: Assignment No. 4 (5%)
April 12: Assignment No. 5/6 (10%)

Presentations (30%) April 19: Groups: Topic 2 (A), Topic 7 (A&B), Topic 6 (A)

April 26: Groups: Topic 8 (A&B), Topic 9 (A&B)

Each student will have 5 minutes to present.

UPDATED CLASS SCHEDULE OVERVIEW

SECTION I: APPLIED ML USING WORKPLACE PROJECT PROCESS

Class 1, January 18: Introduction

Class 2, January 25: ML Workplace Project Process: Multiple Projects Overview

Papers: Topic Selection | Assignment 1: Data

Class 3, February 1: Business Understanding: Financial & Economic Forecasting

Papers: Methodology | Assignment 1: Modeling

Class 4, February 8: Data Understanding: Financial & Economic Data

Papers: Data Selection & Acquisition | Assignment 1 Due

Class 5, February 15: Data Understanding: Credit Risk Management

Papers: Data Preparation

Class 6, February 22: Data Modeling: Credit Risk Management

Papers: Modeling

Class 7, March 1: Model Performance: Quantamental Trading

Papers: Value-Add & Business Format | Assignment 2/3: Data & Modeling

Class 8, March 8: This class will focus entirely on paper | Assignment 2/3 Due

Spring Recess, March 15

SECTION 2: APPLIED ML USING SPECIFIC TECHNIQUES

Class 9, March 22: Classification: Marketing & Sales

Presentations: Topic Selection | Papers Final Draft | Assignment 4 Handed Out

Class 10, March 29: F-Score: Corporate Finance & Accounting

Presentations: Methodology | Papers Due | Assignment 4 Due

Class 11, April 5: Resampling: Supply & Demand

Presentations: Data Selection & Modeling | Assignment No. 5/6 Handed Out

Class 12, April 12: Model Selection & Quality: Auditing & Assurance

Presentations: Value Add & Business Format | Assignment No. 5/6 Due

Class 13, April 19: Presentations Groups: Topic 2 (A), Topic 7 (A&B), Topic 6 (A)

Class 14, April 26: Presentations Groups: Topic 8 (A&B), Topic 9 (A&B)

ML Techniques & Keywords: classification, Bayes classifier, K-Nearest Neighbors (KNN), subset, shrinkage, dimension reductions, F-Score, training data, model selection trade-offs, lasso, least-squares, trees, bagging, boosting, support vector, resampling, cross-validation, K-Fold, bootstrap, standard error, model quality, adequacy of fit, smoothing splines