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# CSE 450 - Machine Learning & Data Mining

## Preparation Reading 04: Probability Theory

## Overview

In this reading we'll review some of the most common ways to visualize relationships between features in dataset.

Estimated Reading Time

Plan on around 60 to 90 minutes for this preparation reading, which contains a mix of online and textbook reading.

## Introduction

Probability theory is a foundational principle behind most of machine learning. A solid understanding of probability theory will not only help you correctly interpret the results provided by machine learning algorithms, but it will also help you decide which algorithms are best suited for particular types of problems.

## Reading

* Read Appendix B (pages 541 - 550) of *Machine Learning and Predictive Data Analytics*
* Watch these two videos about Probability Distributions:

Probability Distribution Reference

I recommend keeping [this playlist bookmarked](https://www.youtube.com/playlist?list=PLaFfQroTgZnzbfK-Rie19FdV6diehETQy) and whenever you read something that refers to a probability distribution that you're unfamiliar with, refer back to the corresponding video.