Shapley Value

Abstract

Shapley values provide an absolute measure of importance for all predictors considered for a supervised model. Shapley values consider all the possible sequences the predictors can enter the model. Each sequence generates one realization of importance, and Shapley values are the average of all realizations. It can calculate the Shapley values for a candidate predictor even when it did not make it into the model (because of linear dependence). The candidate predictor’s Shapley value can tell us its importance if the model does include it. In this Seminar, Dr Lam will walk through the steps to calculate Shapley values using the Python scripting language and will finish it with live demonstrations.