Methodologies

For Predictive Model

Hierarchical Random Forest Learners • Model method:

(1) One Random Forest learner for training and predicting the behavior on game day. (

2) Random forest learner for non-game day situation.

- Feature input : (1) time in a day[0.0..23.75];
- (2) weekday [1..7];
- (3) Football game start time, -1 (if not game on that day);
- (4) Football game end time, -1 (if not game on that day);
- (5) temperature; (6) is_weekend [-1,1];
- (6) is_gameday [-1,1];
- (7) class start time[0.0..23.75];

Three different submodels were used to build this model:

(1) a random forest learner to evaluate the influences of hours, weather, weekday on shape of traffic pattern without course schedule.

(2) a random forest learner to evaluate the combined influences of course schedule, temperature, and basketball game.

(3) a random forest learner to evaluate the behavior in game day.