CAPSTONE PROJECT PROPOSAL Patrick McGuinness

1) Problem

Forecasting the results of football matches for the sports betting industry. The market for betting on football matches is estimated at around \$1 trillion per year. The creation of models which accurately predict results is of significant commercial interest.

2) Client

I am conducting research for my own purposes, my plan is to commercially trade the football betting markets myself. In addition my research may be of interest to a company whose director is a contact of mine, Gambling Book Ltd.

3) Data

I propose to use results collated from www.oddsportal.com for one league, the UK Premier League, from at least ten years back from the present day, or preferably the inception of the league to the present day i.e. 1992/93 – 2015/16.

4) Approach to solving problem

I intend to reconstruct the league table information for each match, i.e. the total points and goals for / against, and then use that information together with the league table information for the previous year, to evaluate the respective strengths of the home and away teams, and thus determine an estimate of the match odds (home win/draw/away win) and perhaps also the correct score betting odds (e.g. 0-0, 1-0, 1-1, etc.).

This will be done by creating a model and then optimising it by reference to the historical data.

The model may be expanded to include analysis of other factors (e.g. form from recent matches).

Possible – the model could also calculate these predictions in-play, throughout the match.

5) Deliverables

The project will deliver:

Code for running the model
Data for historical results and model predictions

Possible - an interface via which bets could be placed prior and in-running of the match