**Bayesian Learning - Project Proposal**

Problem definition

Modeling match results and predict outcomes of football games.

Aim to do something similar to what has been done in the following articles:

[http://www.sumsar.net/papers/baath\_2015\_modeling\_match\_resluts\_in\_soccer.pdf](http://www.sumsar.net/papers/baath_2015_modeling_match_resluts_in_soccer.pdf%20)

<http://www.statistica.it/gianluca/Research/BaioBlangiardo.pdf>

<http://danielweitzenfeld.github.io/passtheroc/blog/2014/10/28/bayes-premier-league/>

Data set

Match results (Goals scored by the respective teams in each game) in the Swedish Allsvenskan during 2015 and the games played so far in 2016.

Models

A hierarchical Bayesian Poisson model.

Analysis

Look at how well the model works at observed data. Also check how well it works on unobserved, future, games.

Try to predict the final standings for the ongoing season.