

Ensemble Models: Sports Analytics & Hedge Funds

Acknowledgements First:



- [Phil Brierley](#)
 - ◆ [How to Improve the accuracy of your predictive models](#)
- First 3X winner Kaggle
 - ◆ 500k Heritage health prize
- Data Science Melbourne Meetup Organizer
- Good at explaining complex concepts elegantly

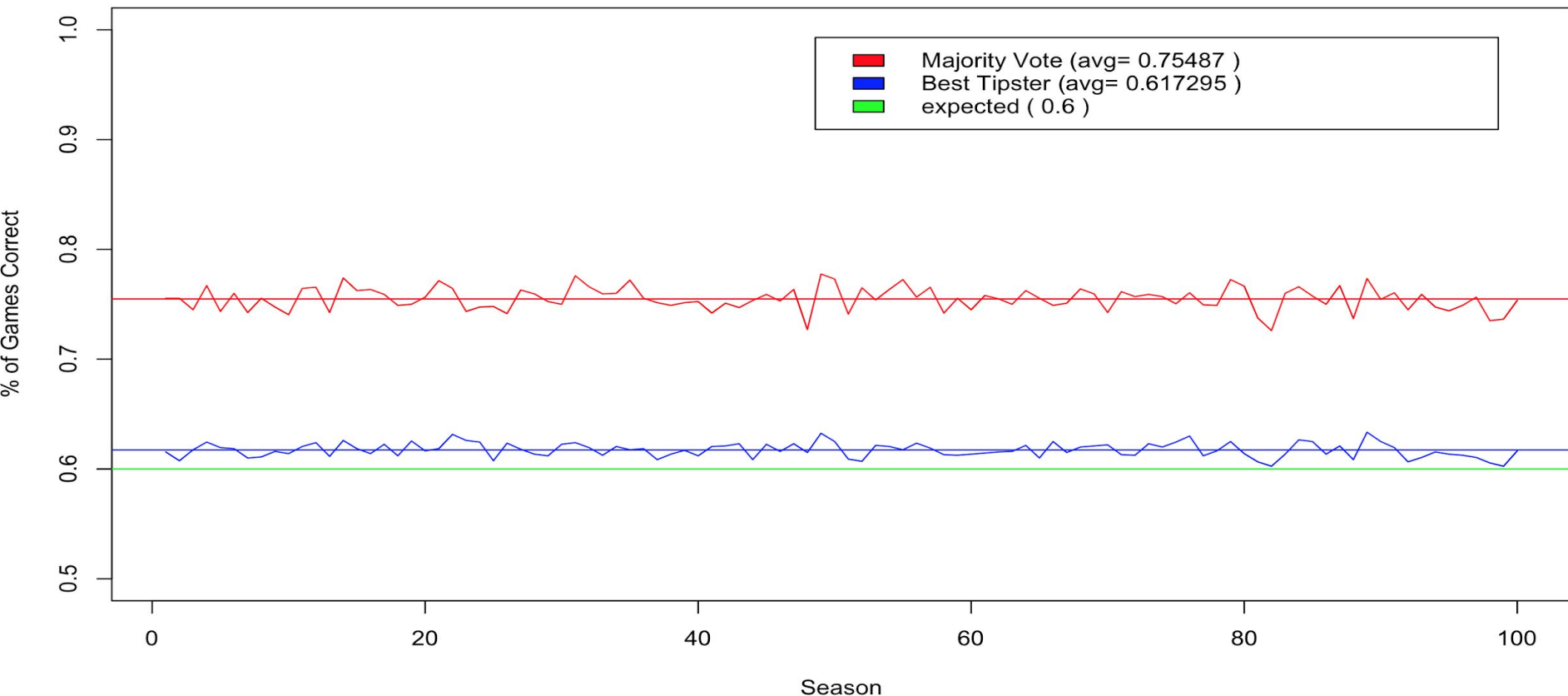
How can you beat your friends
in picking sports winners if
you know nothing about
sports?

Let's look at a simulation for
the answer:

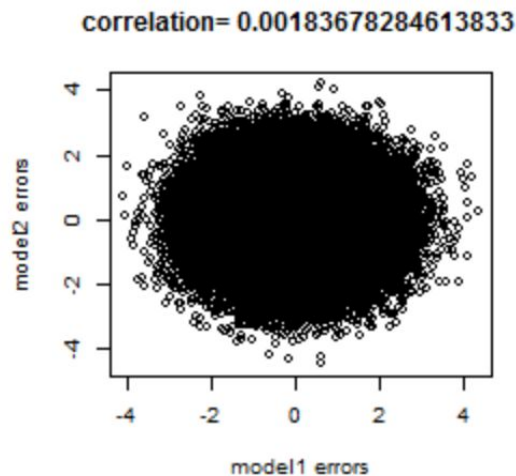
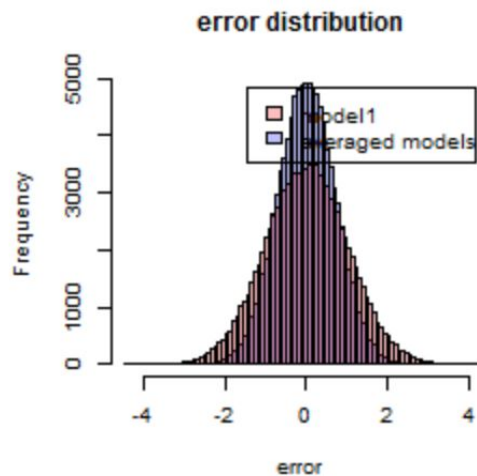
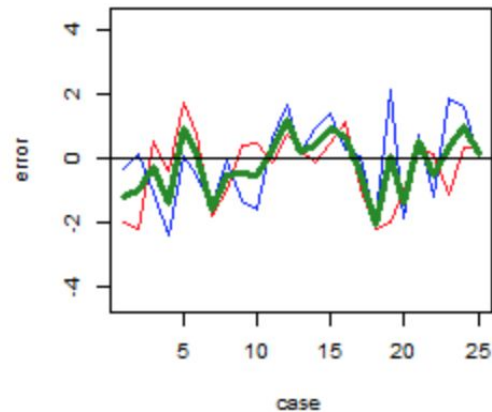
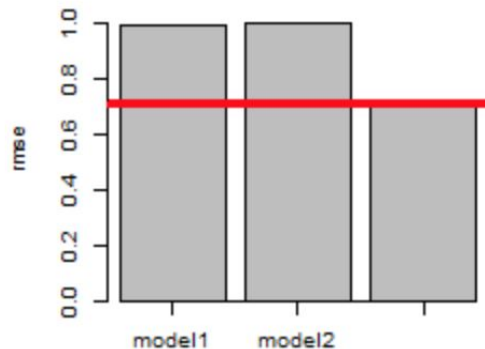
Improving the Accuracy of
your Predictive Models

Lets run the code / simulation
Woot Woot!

Simulated Sports Picking Strategy

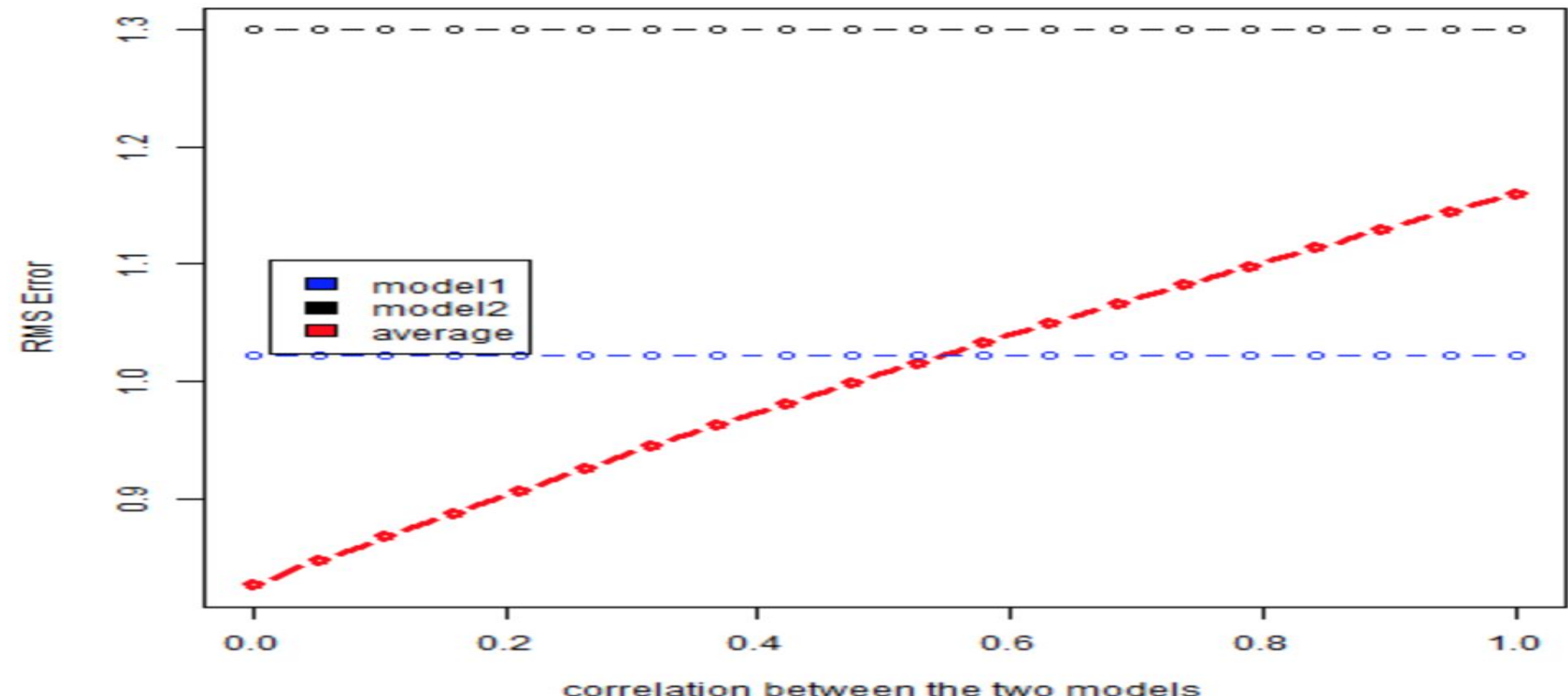


Model Synergy



Model Synergy Varying Correlation

The less correlated the two models, the more synergy when averaged



Lessons from the Kaggle Trenches




- Amanda Schierz:
 - ◆ Checkout Amanda's [538 March Madness Piece](#)
- Zach Dean Mayer:
 - ◆ Check out Zach's [DataCamp Class](#)
- Sergey Yurgenson

Didn't the title of the talk say
something about sports
analytics & hedge funds?



Interview

- Note: I do not, repeat do not condone / endorse Billy Walters investment activity in any way
 - ◆ If you use inside information, you're an idiot

A man with short, dark, curly hair is shown from the chest up. He is wearing a dark, possibly black, long-sleeved shirt. He is looking off-camera to his right with a slight, knowing smile. The background is a warm, yellowish-gold color, suggesting an indoor setting with soft lighting. There are some blurred shapes in the background, including what looks like a framed picture on the wall and some furniture. The overall mood is relaxed and confident.

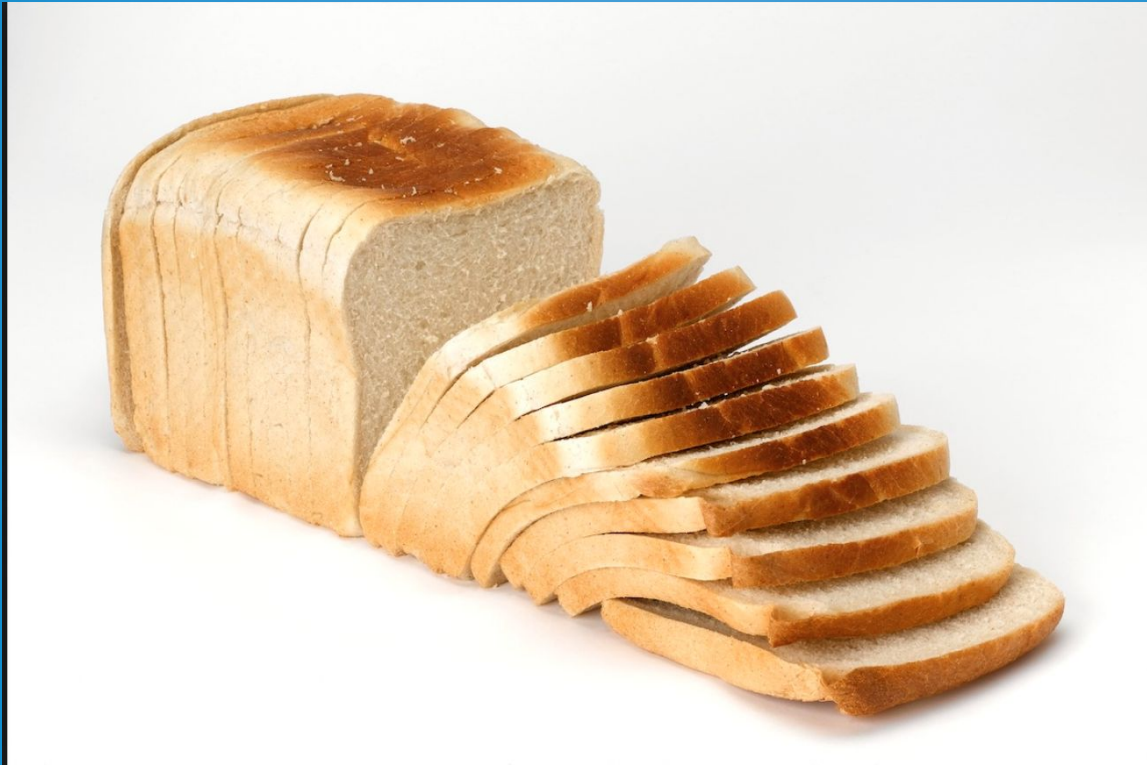
*A million dollars isn't cool.
You know what's cool?*

James Simons



- Renaissance Technologies
 - ◆ Interview
 - MIT Interview if you have some extra time

Are Ensembles the best thing since?



Are Ensembles the best thing since sliced bread?

- [Netflix Case Study](#)
- Increase in Complexity
 - Training Time
 - Interpretability
 - Prediction Latency
 - Code Fragility

Are Ensembles the best thing since sliced bread?

*Always Ask: What's
the value added to
complexity Ratio*

Peter & I
would like to
thank Rob
'meta'
Krzyzanowski



Who said this quote?

“The Supreme Court of the US is basically an ensemble of nine different highly trained neural net models that run a binary classification of whether a problem is “constitutional” or “not constitutional”.

