AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Invited presentation at the 2018 Southern Agricultural Economics Association Annual Meeting, February 2-6, 2018, Jacksonville, Florida

Copyright 2018 by Author(s). *All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

More Emotional Better Predictable

Samir Huseynov, Marco Palma

Texas A&M University

January 18, 2018

Outline

1. Motivation
2. Modeling
3. Results
4. Conclusion

Why Economist should get Emotional?

- Walmart is incorporating facial expression devices that can measure post-purchase customer satisfaction.
- Disney is experimenting with various biometric tools, including eye-tracking and facial expression analysis.
- Is it finally the time of Edgeworth's "Hedonimeter"?

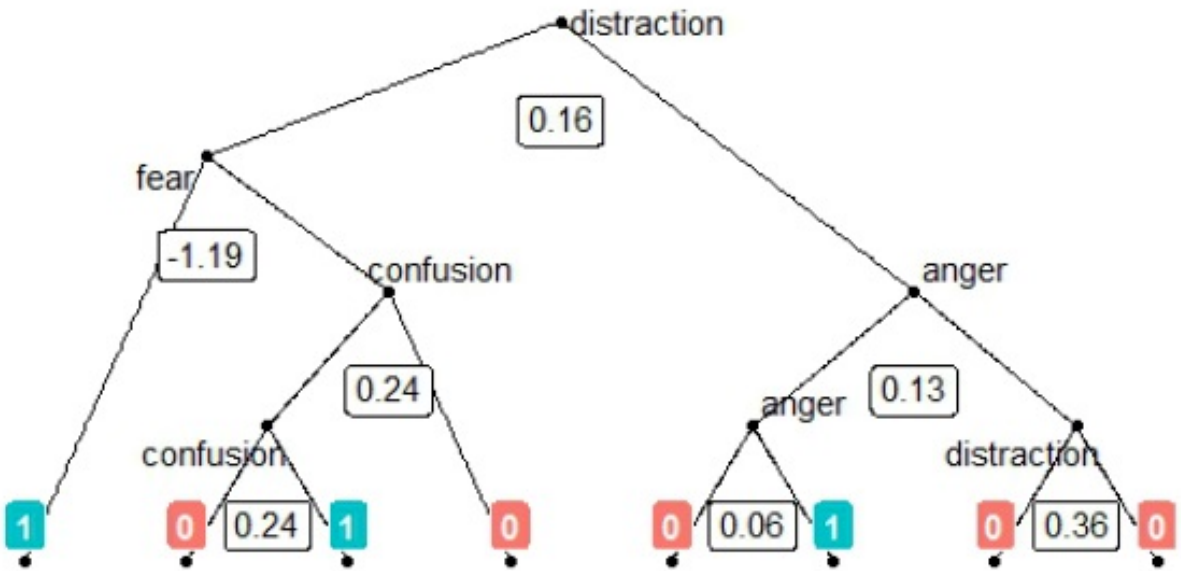
What we find?

1. Surprise and sadness are effective in purchase decisions when neutral emotion is primed, but anger and disgust mostly explain purchase decisions after emotion is primed.
2. Anger (drowsiness) is important to predict non-purchase (purchase) decisions after emotion is primed.
3. Increased intensity of emotion helps to increase the prediction accuracy by 3% under low and 9% under high emotional feelings compared to the regular emotion condition.

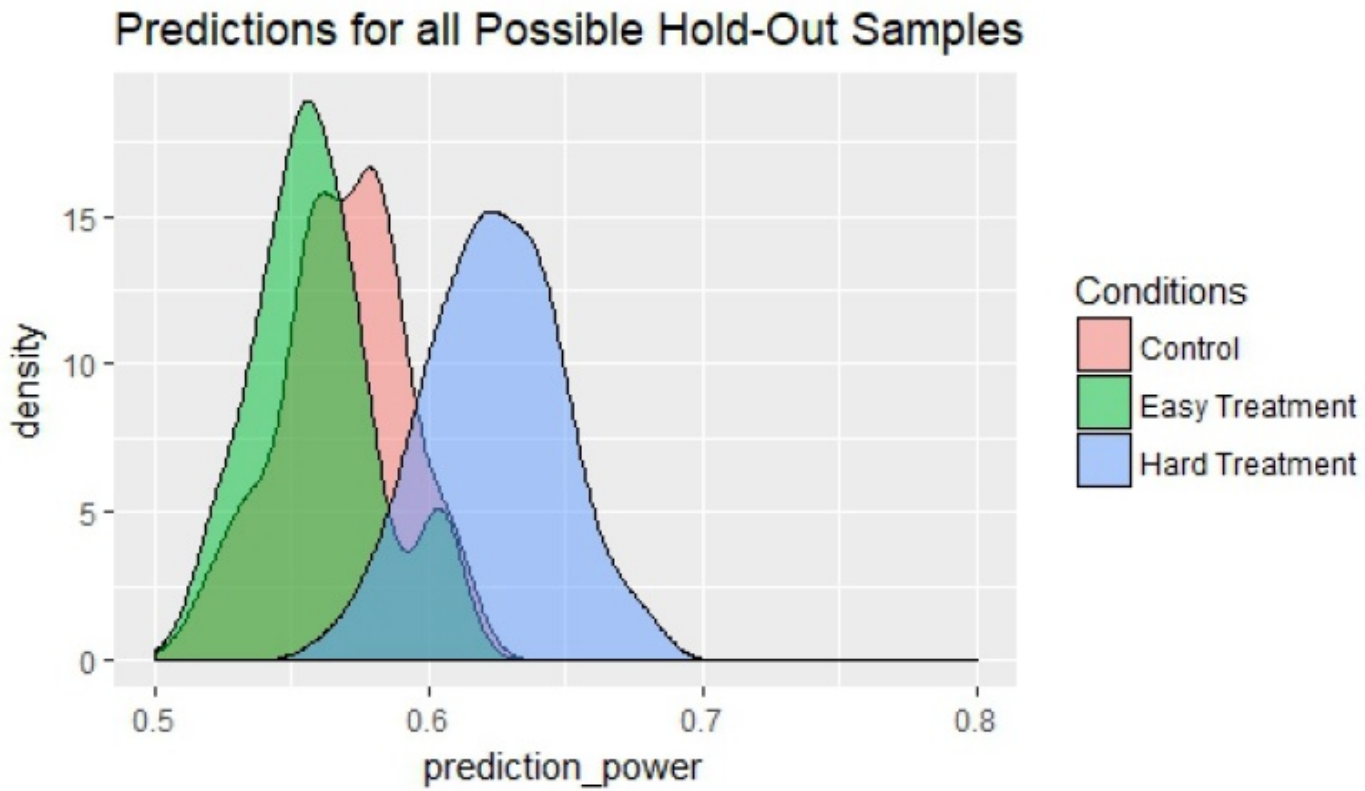
Growing A Tree And Eventually The Froest

Regression trees have been developed to bridge linear models with non-parametric estimations. While growing a tree, at each node $\sqrt{p}$ number of input variables are randomly drawn with replacement. A point, along with the range of each randomly drawn variable, is chosen to do a split to minimize the Residual Sum of Squares (RSS) of the outcome variable.

Classification with a tree



Distribution of Prediction Results



Conclusion

Modern Hedonimeter can increase the prediction power of economic models and thus exhibits the importance of emotional feelings in economic choice.

The End!