



Northeastern

Case Study 3 - One Dataset Many Users

Part 5 - Summary

INFO6105 37364 Data Science Engineering Methods and Tools

March 22, 2019

Project Group 2

Krina Devang Thakkar

Hardik Bhupendra Soni

Yash Thakur Lekhwani

Yashashri Shiral

Ritesh Manek

Analysis

We would recommend Tola to invest with less number of notes, focusing on medium to higher rates of interests, and still maintain a diverse profile because this would give her potentially maximum returns.

Consistent with our key findings we would recommend Tola to use our Random Forest machine learning model for the most accurate interest rate predictions, which will help her take the right decision.

Algorithm	Accuracy	MAPE
Random Forest	Train: 99.91% Test: 99.49%	Train: 0.40 Test: 1.03

We have also regularized and optimized our models for the most efficient performance for these models. Using our Random Forest predictor, Tola could has a chance to see 99.91% of accurate results and thus take a good risk and expect a healthy return.