Responsible Data Science Course Project

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Contents

1 Introduction

Introduction of the assignment for RDS for a viewer who may not be in the class.

2   Background

General Information about our chosen ADS.

- What is the purpose of this ADS and it's stated goals

- If the ADS has multiple goals, explain any trade-offs that these goals may introduce.

3   Input and Output

- Describe the data used by this ADS. How was this data collected or selected?

- For each input feature, describe its datatype, give information on missing values and on the value distribution. Show pairwise correlations between features if appropriate. Run any other reasonable profiling of the input that you find interesting or appropriate

- What is the output of the system (e.g. is it a class label, a score, a probability or some other type of output) and how do we interpret it?

4 Implementation and Validation

Present your understanding of the code that implements this ADS. This code was implemented by others in this part of the assignment. Your goal here is to demonstrate that you understand the implementation at a high level.

- Describe data cleaning and any other pre-processing

- Give high-level information about the implementation of the system

- How was the ADS validated? How do we know that it meets its stated goal(s)?

5   Outcomes

- Analyze the effectiveness (accuracy) of the ADS by comparing it's performance across subpopulations

- Select one or more fairness or diversity measures, justify your choice of these measures for the ADS in question and quantify the fairness or diversity of this ADS.

- Develop additional methods for analyzing ADS performance: think about stability, robustness, performance on difficult or otherwise important examples (in the style of LIME) or any other property that you believe is important to check for this ADS

6   Conclusion & Summary

- Do you believe that the data was appropriate for this ADS?

- Do you believe the implementation is robust, accurate and fair? Discuss any choice of accuracy and fairness measures and explain which stakeholders may find these measures appropriate.

- Would you be comfortable deploying this ADS in the public sector, or in industry? Why so or why not?

- What improvements do you recommend to the data collection, processing or analysis methodology?