Mental Health in TechSpace

Summary of the project:

- Based on the data from the survey we have to classify if the employees are in need for therapy or not.
- This is a supervised learning approach on which we want to perform classification by using the models such as Logistic regression, K-Nearest Neighbors, Support Vector Machines, Naive Bayes, Random Forest, Decision Trees.
- By using some performance metrics we want to determine which model works the best for the given dataset.

Current progress

Exploratory data analysis

Data preprocessing

Data Featurization

Algorithms implemented:

- Logistic regression - 73%
- K-Nearest Neighbours - 59%
- Naive-Bayes -72%
- Support Vector machines - 71%
- Decision Tree Classifier - 76%
- Random Forest - 72%

Current progress on Write UP

- Have completed the following sections:

  Proposal

  Introduction

  Methods and Implementations

- And currently working on the results and discussions section.

Contributions

Thanoosha Naidu Karri:

- Data Preprocessing
- Data Featurization
- Fitted Naive Bayes and Support Vector Machine

Priyarsha Vallabhaneni:

- Fitted the Logistic Regression model on the pre-processed data.
- Fitted Decision Trees model, as another classification methodology, on the data.

Sai Madhuri Kandula:

- Performed exploratory data analysis
- Fitted the models K-Nearest Neighbors and Random Forest Classifier

Plan

- Complete the Report
- Complete the presentation
- Try to improve the performance of the models further.