

Linguistic Stress Prediction System

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Abstract: *The COVID-19 pandemic has proved to be a challenge for most of the businesses, working professionals and organizations. With the unconventional and different work style patterns being adopted there has been an increased risk of stress among employees. Despite a lot of mental health awareness programs stress continues to creep in everyone's life. Mental Health being a paramount subject for everyone, we have taken a small step to utilize the various predictive analytic methods to discover and examine stress in employees. For this project twitter data of working employees has been used. Multiple predictive analytic methods were used to train the model post required data sanitation and preliminary filtering. Natural Language Processing methods have been used to clean the tweets from the dataset and then using predictive analytics methods like Random Forests and Support Vector Machines, sentiment of the tweet of that employee is analyzed to predict whether the employee is in stress or not. Using these results the employers can spot early signs of stress among employees and address the scenario.*

Keywords: Natural Language Processing, Tweets, Random Forests, Support Vector Machines

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