## ABHIJIT NAYAK (nayakab), SPRING 2022, PROPOSAL 1

## WHAT IS THE PERCEPTION OF PEOPLE TOWARDS WORKING FROM HOME USING TWEETS? (425 words)

**Research Question:** What is the perception of people towards working from home using tweets?

**Background:** Covid-19 pandemic has engulfed the world in a lot of problems and new changes have come up due to the existing problems at hand. Employees expressed conflicting emotions towards working from home as all the offices were closed due to the lockdown [1]. As a result of government mandates during the pandemic, people had to stick to remote work which means a sort of arrangement where people carry out their job responsibilities from the place where they live [2]. Here I will be analyzing the sentiments of working people towards working from home in the corona virus pandemic using data scraped from twitter.

**Data:** I am going to collect data from Twitter at least 500 posts or more. The scraping process from Twitter will be done using a framework called Tweepy developed in Python widely used for scraping data/tweets from twitter based on certain keywords provided as input. There are other python frameworks such as snscrape and twitterStreaming. I will also use these two and compare whichever framework eases out the process of data collection and choose that framework. The keywords I am going to search for are telework, remote work, work from home. My preferred choice of search keywords is not case sensitive. The kind of posts I am looking for are "Remote work is still work, but without the wasted time and money of commuting it leaves people with more personal time. It's just better" and "Wanting to end Remote Work is just evil. People are able to work in peace at home, prioritize their mental health, spend more time with their families, save money on commuting/childcare and somehow you are thinking of ways to make their lives as miserable as possible". These kinds of posts provide detailed information about what people are feeling towards the work from home initiative and their attitude as well as emotions too. These kinds of posts would help me analyze their sentiments and build a better model on top of it.

**Method:** After scraping the data based on different keywords, I will be using Vader or TextBlob python packages to do the sentiment analysis on the tweets scraped. This will give me positive, negative, and neutral tweets which I can use as labels for model training. I will use word embedding techniques like Word2Vec/Gloves/Sentence Bert to train the model with their respective labels obtained in the previous step and predict on some unseen tweets to find out the performance of the model.

**References:** [1] Employee Sentiment Analysis Towards Remote Work during COVID-19 Using Twitter Data Nagaratna Parameshwar Hegde, Sreesha Vikkurty, Gnyanee Kandukuri, Sriya Musunuru, Ganapatikrishna Parameshwar Hegde <u>Google Scholar</u>

[2] Exploring Public Sentiment on Enforced Remote Work During COVID-19 Charlene Zhang, Martin C. Yu, Sebastian Marin Google Scholar