

## **IDEA 1:**

### **LinkedIn Post Popularity Evaluator (Theme 3: Online Communities)**

Main idea is for any user to see how well structured, thought out, and well-prepared their LinkedIn post is. In a perfect world, this project would tell users some metrics calculated using existing LinkedIn data and suggest improvements.

#### **What you want to do?**

I want to explicitly look at top LinkedIn post creators. A “top LinkedIn post creator” would most likely be set by some criteria; through which we could answer by asking questions such as... how many followers do they have, average number of likes/comments per post, how often they post, and so on. Additionally, I want to look at the user’s profile as well to gain metrics such as age, industry, current profession, and so on.

#### **Why should we care?**

We currently live in a work demographic where the process of recruiting, interviewing, and networking, in the professional work setting, is changing rapidly. There are existing tools to help prepare for interviews, pass a resume through an automatic filtering system to simulate how it’ll do once you submit your application to an employer, and so on. LinkedIn is considered pivotal to the professional setting, helping people find their first role, share a nugget of knowledge, or vice-versa help recruiters gain a sense of the applicants they’re reviewing.

A new skill of being digitally fluent has emerged that many people still don’t fully comprehend. I believe this idea will help add another level to this existing system by helping those who may not necessarily know how to behave in a digital environment or possibly to just grow their network connections. This would help them appear more professional; and consequently help them gain digital competency to further their career.

#### **Keywords – To mark topic and domain of the idea.**

Natural Language Processing (NLP), Sentiment Analysis, Machine Learning, Web Scraping, Data Mining

## **IDEA 2:**

### **Social Media Spam Detector (Theme 3: Online Communities)**

Idea is to categorize users as either a “legitimate user” or “troll/spam/bot” account.

#### **What you want to do?**

Start looking at factors that constitute a legitimate user from a spam account, troll, bot, etc. account. To start, we'll need a baseline understanding of how an average user utilizes a social media platform then also form definitions of what these other accounts are like.

Some factors I've thought about are account creation, number of followers and number of people they follow, frequency of posts (as well as details within the post such as sentence structure, keywords, etc.), and the people they follow.

Start asking questions about if their profile picture “seems legitimate”, how many mutual connections do they have with “legitimate” accounts.

#### **Why should we care?**

Social media has evolved to a point where adolescents all the way to the elderly utilize it heavily. It's more important as these demographics are especially vulnerable to malicious attempts online. The project will serve to help safeguard those vulnerable to using social media - and the internet in general.

The internet is a tool that everyone is assumed to know how to use properly but that's typically not the case. Those attempts grounded in scamming and/or malicious intent are constantly evolving to keep up with the current technological environment; and as a result, tools to protect against those need to as well.

#### **Keywords – To mark topic and domain of the idea.**

Spam detection, social media, data mining, Facebook, Twitter, Instagram, Natural Language Processing (NLP), Socio-networks, Machine Learning, Data Mining