

**IDEA 1:****Project title 1 (Descriptive title that captures your idea1)**

Misinformation in the specific domain/ topic

**What you want to do?**

*Your response. Longer response that provides a bit more description than what's in the title.*

**NOTE:** *Focus on the problem that you are trying to solve. Think in terms of driving research questions (RQs). You don't have to focus on methods at this stage. For e.g., your answer should not start with.. "Using sentiment analysis, I would do this...", "I wish to use unsupervised learning methodology for this task"*

I would like to know what kind of messages are more likely to be fake. What are the key features of misinformation? I wish to use natural language process to understand the contents. Then, we need to define what is misinformation. How many contents can be treated as misinformation?

**Why should we care?**

*Your response. Provide a motivation of why this project is worth pursuing? That is, if you are successful, what difference will it make?*

Misinformation is a serious problem nowadays since people use social media every day to receive and send information. This analysis can help us learn what could be misinformation. It can assist people to get more attention to the misinformation and decrease the times to be misinformed.

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

*Your response. Comma separated keywords*

*Theme 1(news and misinformation), machine learning, NLP, anomaly detection, misinformation*

**IDEA 2:****Project title 2 (Descriptive title that captures your idea2)**

Behavioral analytics with business or marketing strategies

**What you want to do?**

*Your response. Longer response that provides a bit more description that what you have in the title*

The research questions are: What are the key points users care most about buying products? How well users receive marketing messages?

User actions in the whole user journey on the specific social network could be our source data, and it can include the clickthrough rate, responses(text), and other numeric features. We can combine with customer data from any online shopping platform. Then, we can deploy different machine learning models to analyze data.

**Why should we care?**

*Your response. Provide a motivation of why this project is worth pursuing? That is, if you are successful, what difference will it make?*

During the pandemic, more people buy products from online platforms. Usually, people may share their opinions about products or marketing events on social media. Also, McKinsey research concluded that organizations leveraging customer behavior data to generate behavioral insights become able to outperform peers by a whopping 85% in sales growth and over 25% in gross margin. This analysis can help us know more about customers' challenges and preferences. We can get more information about the customer journey.

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

*Your response. Comma separated keywords*

Theme 3 (online communities), machine learning, marketing research, user behavioral analytics