**TITLE: How Can We Prevent Fake-News Transmission?: An ML-based Analysis**

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**PROBLEM STATEMENT:**

The prevalence of misinformation has skyrocketed in today’s world of social media, affecting the decision-making process of the general population. Our objective is to develop a machine-learning (ML) based framework that can be used as a “misinformation predictor” if trained properly. We will also provide a detailed exposition into the performance metric of different ML-based techniques to improve the prediction confidence. Finally, we will present a set of concluding remarks that will enable the user to have better understanding of potential fake news even without an ML-based model, and prevent the transmission of misinformation. If developed properly, this framework can act as a primary filter embedded in social media sites and defend the general population against targeted misinformation.

**DELIVERABLE:**

1. Jupyter notebook: A complete pipeline demonstrating the application of ML-based framework as an information-classifier.
2. Jupyter notebook: A comparative performance-analysis of different machine-learning techniques
3. A web-page at Google sites: Summary and concluding remarks.

**SKILLS NEEDED:**

Language: Python, Jupyter Notebook, TensorFlow/Keras, etc.

**DATA:**

Dataset 1 (University of Victoria): <https://www.uvic.ca/engineering/ece/isot/datasets/fake-news/index.php>

Dataset 2: <https://github.com/rpitrust/fakenewsdata1>

Dataset 3: <https://www.kaggle.com/c/fake-news/data>

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