**Enhancing Sentiment Analysis through Natural Language Processing (NLP)**

By

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**Topic**:

Our research is about making computer programs better at understanding how people feel in written messages. We want to improve the way computers can tell if a message is happy, sad, or even joking, like when people use sarcasm.

**Research Foundations:**

We're building on what smart researchers have already found out about reading feelings in words. Some really smart people have written important things about this already, and we're using their ideas to make our project even better!

**Research Objectives:**

• We want to build a smart computer program that can understand feelings in messages like a human can.

• We're going to use special language tricks to help the computer understand when words are being used in a tricky way.

• Our computer will learn from many examples to be very good at this feeling-reading job.

• We'll make our program even smarter by tweaking it and trying different things to see what works best.

**Broader Applications:**

This computer program can help in many ways:

* **Helping Businessess:** It can tell companies what people like or don't like about their products by reading what people say.
* **Social Media Understanding:** It can understand what's popular or not on social media, which helps companies and famous people make better choices.
* **Government Decisions:** It can even help the government understand what people think about important things, so they can make better decisions.

We hope our project will make computers really good at understanding how people feel when they write, and this will be useful for many people and companies.