

You're horrible for looking at this poster!

amazing x

nice x

not horrible x



## Introduction

### What is Sentiment Analysis?

- Measures the feelings of the words you use

### What are word embeddings?

- Represents English words using numbers
- Allows mathematical vector operations
- (man – woman = king – queen)
- Examples Word2Vec and GloVe

### Where is Sentiment Analysis used?

- Targeted advertising
- Stock market investment
- Crowd opinions and sentiment.

### What is Natural Language Processing?

- Field of study focused on human language
- Aim is to make interaction more natural when working with text

## Application Description

### What does “Sentimentally” do?

Sentimentally is **autocorrect for sentiment**, where the suggestions are words and phrases which can help the user hit their sentimental target.

The goal is to allow users to present their sentiment in a more straightforward way.

Target texts for this application are small texts like **tweets**, and larger **previews**

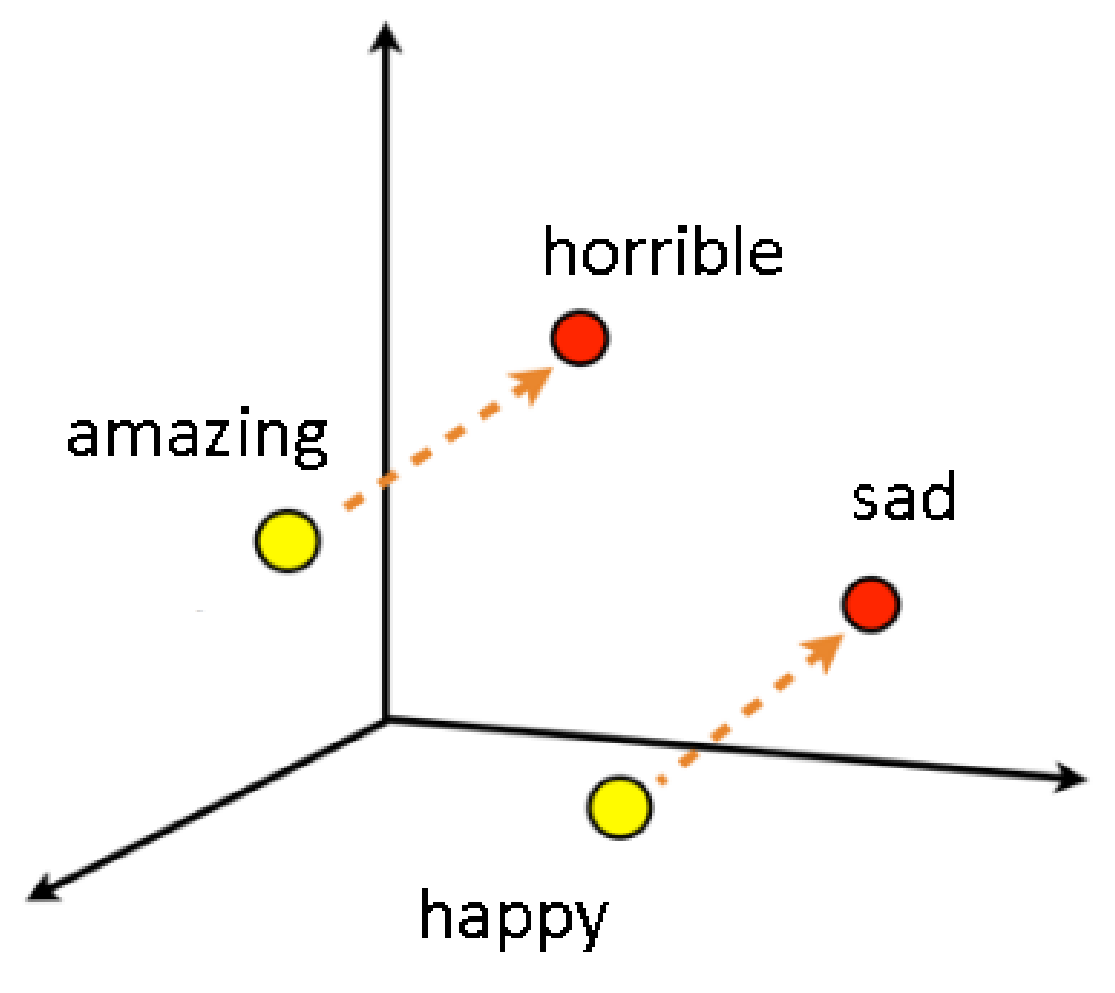
## Plan and Progress

### Pipeline for Analysis and Alterations:

- Clean text input: Expand words, remove grammar.
- Locate sentiment heavy words, find semantically related words using word2vec/GloVe
- Correct PoS tagged related words are kept.
- Replace words and check new sentiment.

### Future Tasks and Goals

- Combine word changes/
- Add extra words to sentences, and experiment with “Boo and Hooray” words.
- Test different combinations of algorithms for PoS and Sentiment Analysis.
- Focus towards shifting to a specific target value for sentiment.



## Example Text

The greatest joy I have ever felt is when the Jonas brothers reunited

finest x sadness x

love x

My life significantly improved when i saw a video of the happiest goats of all time

enhanced x

saddest x

coolest x

Every line of code I change is painful and exhausting

exhilarating x

traumatic x

Got chicken wrap from Taka Taka. So I really have no regrets.

sorrow x

remorse x

## Business and Applications

### Business

- Extensions for grammarly
- Human Resources internal reviews in large companies
- Online anti-bullying measures

## References

