

**Title:** Generating Sarcastic Comments with LSTMs

**Abstract:** In this project, we attempted to create a neural network that could generate sarcastic comments based on inputted text. We chose to implement this because our group is full of people who love to use sarcasm and wondered if a computer could generate its own version, especially because sarcasm is a pretty complex speech pattern to comprehend even for humans. We found numerous sources with different datasets that have implemented a sarcastic comment classifier, but we didn't find any which could generate their own comments. Sentiment analysis is notoriously hard in the field of deep learning since there aren't any concrete rules for how emotion is portrayed through words. The unique challenge with detecting sarcasm was that the same sarcastic statements could be not sarcastic depending on the tone and context, and we had to figure out a way to analyze tone and context using only language. We thought that we could use LSTMs, generally used for text processing and analysis, to develop a neural net that could classify statements as sarcastic or not, and perhaps even generate it's own (generation is challenging because sarcasm depends upon the context as much as the actual sentence to create the sense of sarcasm).

**If our abstract isn't detailed enough, here is our final presentation:** [https://docs.google.com/presentation/d/1JyODOwKI\\_Lfx0kQSqfbh692ChFSweuC5V8wkXeAcMe4/edit#slide=id.g6c5d4579a6\\_1\\_1](https://docs.google.com/presentation/d/1JyODOwKI_Lfx0kQSqfbh692ChFSweuC5V8wkXeAcMe4/edit#slide=id.g6c5d4579a6_1_1)

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