

1. What are the names and NetIDs of all your team members?

- Artsiom Strok – astrok2@illinois.edu
- Peter Zukerman - peterz2@illinois.edu
- Dheeraj Patta – npatta2@illinois.edu

2. Who is the captain? The captain will have more administrative duties than team members.
Dheeraj (npatta2) will take care of the administrative duties.

3. Which competition do you plan to join?

We are joining **Text Classification competition – Twitter Sarcasm Classification**.

4. If you choose the classification competition, are you prepared to learn state-of-the-art neural network classifiers?

Yes, we are planning to work on the problem starting with considering text as “bag of words” or n-gram models and use classic machine learning algorithms namely Regression, Support Vector Machines (SVM), Naïve Bayes etc. followed by ensembles and boosting algorithms like Trees, XGBoost, CATBoost etc. Based on the performance and evaluations, we will move towards the ones which utilizes sequence of words and work with Convolution Neural Networks (CNNs) or Recurrent Neural Networks (RNNs) etc.

We are planning to work with Deep Learning SOTA models based on our evaluation and performance on the Test set. We’d like to explore the possibilities of utilizing best state-of-the-art models/frameworks like Google’s BERT, Facebook’s ALBERT, XLNet, ERNIE etc.

Without limiting to the competition, we’d like to expand our group project to be a learning experience by diving into some of the NLP breakthroughs like Multi-class Attention Models, Transformers, Zero-shot Learning etc.

<https://gluebenchmark.com/leaderboard>

5. Which programming language do you plan to use?

Python is our go-to language for this competition. We will be utilizing frameworks/libraries like TensorFlow and Keras and related packages/libraries. We will also utilize GPUs through Google Collab or NVIDIA CUDA as necessary.

6. Additional Information – Project/Competition Lifecycle –

Data → Pre-processing → Data Enrichment → EDA → Model → Evaluations → Hyper-parameter Tuning → Benchmarking → Submission → Revisions until successfully beating the baseline.