**Proposal of the text classification competition**

1. What are the names and NetIDs of all your team members? Who is the captain? The captain will have more administrative duties than team members.

My group has only one member.

Jiajun Wu, jiajunw6.

So I will be the captain myself.

1. Which competition do you plan to join?  
   I would like to join a text classification competition.
2. If you choose the classification competition, are you prepared to learn state-of-the-art neural network classifiers? Name some neural classifiers and deep learning frameworks that you may have heard of. Describe any relevant prior experience with such methods

Though I am not very familiar with most classifiers, I decide to learn some of these and I hope they will be useful in the competition. While my interest is classification and prediction of utterances in classroom contexts, I heard of some neural network classifiers and deep learning frameworks which were employed in this area. For instance, Zhao (2016) developed a sequence predictor using three neural network classifiers (i.e. MLP, CNN, and LSTM). Donnelly et al. (2016) used the Naïve Bayes classifier using the WEKA machine learning toolbox identified five key instructional segments (Question & Answer, Procedures and Directions, Supervised Seatwork, Small Group Work, and Lecture) in the classroom audio data with F1 scores ranging from 0.64 to 0.78. Suresh et al. (2019) trained a bi-LSTM network to classify the transcript of teacher-student dialogues sentence by sentence in to 6 talk moves (e.g. Restating, revoicing, pressing for reasoning, getting students to relate to another’s ideas, etc.) with an F1 measure of 65%.

**Reference**

Donnelly, P.J., Blanchard, N., Samei, B., Olney, A.M., Sun, X., Ward, B., Kelly, S., Nystran, M. and D'Mello, S.K., 2016, July. Automatic teacher modeling from live classroom audio. In *Proceedings of the 2016 conference on user modeling adaptation and personalization* (pp. 45-53).

Suresh, A., Sumner, T., Jacobs, J., Foland, B. and Ward, W., 2019, July. Automating Analysis and Feedback to Improve Mathematics Teachers’ Classroom Discourse. In Proceedings of the AAAI Conference on Artificial Intelligence (Vol. 33, pp. 9721-9728).

Zhao, Y., Chu, S., Zhou, Y. and Tu, K., 2017, January. Sequence Prediction Using Neural Network Classiers. In International conference on grammatical inference (pp. 164-169).

1. Which programming language do you plan to use?

I plan to use Python, and C++ if it is necessary.