# CS671 Assignment 3

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## **Preparing Training Data**

- 1. Create a transition sequence along with operations from the Treebank using the transition rules given in the slides.
- 2. Each transition state along with the corresponding operation serves as a training pair.

#### **Features**

- 1. Use word vectors for 3 words from top of the stack and top of the buffer.
- 2. Each word vector contains word embedding from GLoVE/Word2Vec concatenated with one-hot encoding of the POS tag for that sentence.
- 3. Concatenate all 6 vectors to form the feature for a configuration.

### **Results**

Training Sentences: 1000 Test Sentences: 100 Final Accuracy: **91.14** %

Training Sentences: 10000 Test Sentences: 1000 Final Accuracy: **94.64** %

#### Sources

1. TreeBank: <a href="https://github.com/UniversalDependencies/UD">https://github.com/UniversalDependencies/UD</a> English-EWT

2. GLoVE Vectors: http://nlp.stanford.edu/data/glove.6B.zip