## Natural ansuase Processins

### ANSWERING YOUR "DEEP" QUESTIONS

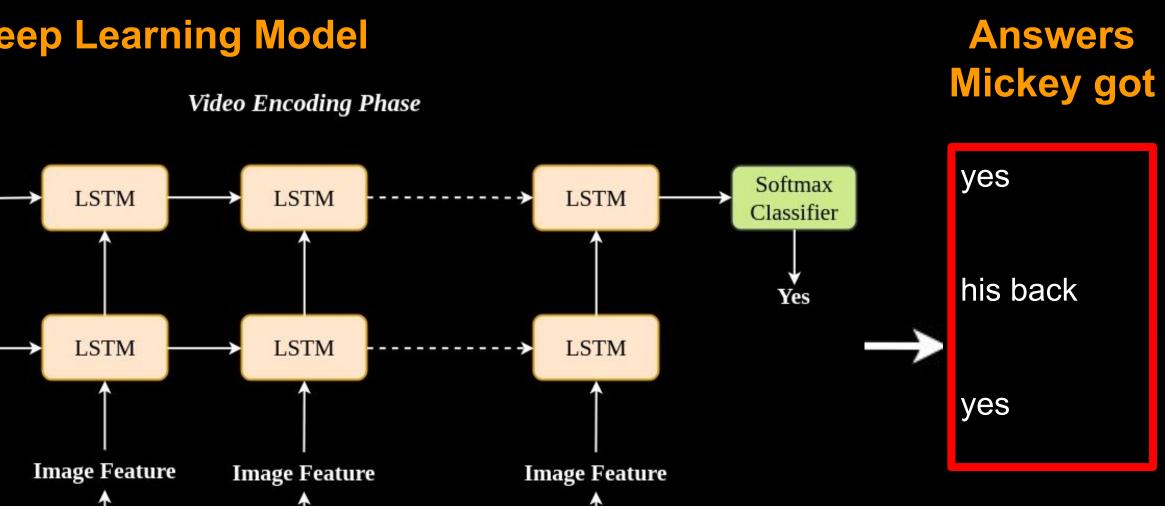
IST 664 | Members' Names Removed

Visual Description: This BMXer does a flip on a half pipe and lands flat on his back. Fortunately, he is able to get up and walk it

Mickey has a series of questions after seeing this visual



# Questions Mickey has Question Encoding Phase Video Encoding Phase LSTM LST



Last Frame



**Exploratory Data Analysis** 

Data Pre-processing and Sentence / Word Tokenization to reach a conclusion that ...

The Visuals mainly talk about



#### The questions are mainly of the following types

what 29.03%	does 15.83%	was 9.93	%
did 23.51%	is 8.80%		do 4.04%
	who		
	7.34%		are

Frame2

We have compared our model with 3 base models for performance evaluation. Here we have compared "our model" with "Extended Soft Attention model"

The basis for evaluation are:

- 1. "Yes / No" and "Others" denote Standard Classification Accuracy
- 2. "Yes" and "No" denote Accuracy which penalize the False Positive

### SENTIMENT ANALYSIS



Total number of positive visual representations



Total number of negative visual representations

412

1588