# **Independent Work Background Preparation Overview**

Pulkit Singh

#### **Courses:**

- Machine Learning (Stanford University, on Coursera)
- Deep Learning Specialization (Nvidia and deeplearning.ai, on Coursera), with the following five courses:
  - Neural Networks and Deep Learning
  - Improving Deep Neural Networks: Hyperparameter tuning, Regularization & Optimization
  - o Structuring Machine Learning Projects
  - o Convolutional Neural Networks
  - o Sequence Models

#### **Reference Books:**

- Speech and Language Processing (Jurafsky and Martin)
- Natural Language Processing with Python (Bird, Klein and Loper)

## Papers:

## Sarcasm Detection:

Barbieri, Francesco, Horacio Saggion, and Francesco Ronzano. "Modelling Sarcasm in Twitter, a Novel Approach." ACL Anthology. June 2014. Accessed September 21, 2018. https://aclanthology.coli.uni-saarland.de/papers/W14-2609/w14-2609.

Mishra, Abhijit, Diptesh Kanojia, Seema Nagar, Kuntal Dey, and Pushpak Bhattacharyya. **"Harnessing Cognitive Features for Sarcasm Detection."** ACL Anthology. August 2016. Accessed September 24, 2018. https://aclanthology.coli.uni-saarland.de/papers/P16-1104/p16-1104.

Joshi, Aditya, Vinita Sharma, and Pushpak Bhattacharyya. "**Harnessing Context Incongruity for Sarcasm Detection."** ACL Anthology. July 2015. Accessed September 24, 2018. https://aclanthology.coli.uni-saarland.de/papers/P15-2124/p15-2124.

Ghosh, Aniruddha, and Tony Veale. "Magnets for Sarcasm: Making Sarcasm Detection Timely, Contextual and Very Personal." ACL Anthology. September 2017. Accessed September 22, 2018. https://aclanthology.coli.uni-saarland.de/papers/D17-1050/d17-1050.

P. Chaudhari and C. Chandankhede, "Literature survey of sarcasm detection," 2017 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), Chennai, 2017, pp. 2041-2046. doi: 10.1109/WiSPNET.2017.8300120

## Emoji Analysis

Wijeratne, Sanjaya, Lakshika Balasuriya, Amit Sheth, and Derek Doran. "EmojiNet: Building a Machine Readable Sense Inventory for Emoji." ArXiv. October 25, 2016. Accessed September 25, 2018. https://arxiv.org/abs/1610.07710.

Barbieri, Francesco, Miguel Ballesteros, and Horacio Saggion. "Are Emojis Predictable?" ACL Anthology. April 2017. Accessed September 24, 2018. https://aclanthology.coli.uni-saarland.de/papers/E17-2017/e17-2017

Novak, Petra, Jasmina Smailovic, Borut Sluban, and Igor Mozetic. "Sentiment of Emojis." *CoRR*1509 (2015).

Wahyuni, Rinda, and Indra Budi. "Combining Linguistic, Semantic and Lexicon Feature for Emoji Classification in Twitter Dataset." *Procedia Computer Science*135 (2018): 194-201. ScienceDirect.