**Name: Ahmed Hani Ibrahim**

**CS624 Course Feedback**

**Acknowledgement**

First of all, I want to show my appreciation to all who participated and helped on creation of this course. I consider this course one of the best courses I took since I begin interesting in research field, specifically, Machine Learning and Natural Language Processing fields.

Actually, I took a similar course from Stanford University ([Deep Learning for Natural Language Processing](http://cs224d.stanford.edu/syllabus.html)). It was an awesome course for those who are interested in Natural Language Processing. I didn’t expect that our course will be near to it, but surprisingly, I found our course is nearly similar to this course, also the materials were as quality as stanford’s course.

This really made me happy and proud to learn such amazing topics in Egypt.

So, I would like to thank **Dr. Aly Fahmy** for such course, also I would like to thank **Dr. Ahmed El Sallab** and **Eng. Khaled El Maadawy** for their awesome efforts to prepare the deep learning sessions.

**What have I learnt during the course?**

Well, we can divide the course to 4 different branches:-

1. Simple Machine Learning
2. Symbolic Machine Learning
3. Neural Networks and Deep Learning
4. Natural Language Processing applications

Simple machine learning techniques such as (Naive Bayesian, Linear Regression, Logistic Regression, support vector machine) were understandable to me, maybe because I have a background about these techniques and algorithms, but anyway, I think these are very simple machine learning that are based on probabilities and statistics. Although I have some problems with understanding support vector machine optimization technique.

Symbolic machine learning such as (Decision Trees, Random Forests) were quite understandable to me. They are based on old machine learning school which depends on inference and logic conclusions.

Regarding Neural Networks, I also have a good background about them, basically Multi-layer Perceptron and Radial Basis Neural Networks. So, I have learnt how Neural Network works and how can I use it for classification tasks, but I wished that the number of assignments and tasks were more than we took.

I remember that Neural Network session were in the same session of Auto Encoder and Restricted Boltzmann Machine, I think this was much load for those who doesn’t have a good background about the basics of Neural Network. I think the naive Neural Network should be taken in 2 sessions with multiple practices and assignments.

Regarding Deep Learning, I have no previous experience with it, so, topics such as (Auto-Encoder, Restricted Boltzmann Machines, Convolutional and Recurrent Neural Networks, ..etc.) were new to me. I can’t say that I now know everything about them, but I think I know the basic intuition about each one of them, I know what to use in a specific problem. But the mathematics behind each one of them I can’t say that I am good with all of them.

That’s why I wished there were many assignments on these important topics, to learn and know more about them.

I know that the course is limited with time and a specific range of sessions, but I just say what I wished to be done in this course.

And finally, regarding Natural Language Processing applications, they were very interesting to me, because I am interested in Natural Language Processing and maybe my thesis will be about one of its hottest topics. Knowing nowadays applications such as Siri and ImageNet were very interesting to those who want to continue in research field.

I actually wanted to know more about some basics Natural Language Processing topics that are strongly related to Linguistics such as Parse Trees, Named Entities Extractions and Relations Extraction.

*Finally, Jazakum Allah Khayran for this course :)*