



## BON SECOURS COLLEGE FOR WOMEN

Affiliated to Bharathidasan University, Thiruchirapalli-620024, Recognized  
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### DEPARTMENT OF INFORMATION TECHNOLOGY

#### RESEARCH AREA- DEEP LEARNING

- Deep Learning is gaining much popularity due to its supremacy in terms of accuracy when trained with huge amount of data.
- A big advantage with deep learning, and a key part in understanding why it's becoming popular, is that it's powered by massive amounts of data. The "Big Data Era" of technology will provide huge amounts of opportunities for new innovations in deep learning. As per Andrew Ng, the chief scientist of China's major search engine Baidu and one of the leaders of the Google Brain Project, *"The analogy to deep learning is that the rocket engine is the deep learning models and the fuel is the huge amounts of data we can feed to these algorithms."*
- The biggest advantage Deep Learning algorithms as discussed before are that they try to learn high-level features from data in an incremental manner. This eliminates the need of domain expertise and hard core feature extraction.
- Deep Learning techniques tend to solve the problem end to end, where as Machine learning techniques need the problem statements to break down to different parts to be solved first and then their results to be combine at final stage.
- Deep Learning algorithm takes much less time to run.
- When there is lack of domain understanding for feature introspection, Deep Learning techniques outshines others as you have to worry less about feature engineering.
- Deep Learning really shines when it comes to complex problems such as image classification, natural language processing, and speech recognition.