

**Siraj Singh Sandhu**

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I am a second year undergraduate student with an interest in Applied Probability, Data Science and Machine Learning. I am also very keen on debates on public and foreign policy, including geo-political relations, especially in the Middle East.

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**Education**

Matriculation	2014	St. John's High School, Chandigarh	10 CGPA
Intermediate	2016	Sri Guru Gobind Singh Sr. Sec. School	91.8%
BTech	2016-	Indian Institute of Technology, Kanpur	8.91 CGPA

**Course Details**

Semester	Total Credits	Highlights
Aug 2016 - Dec 2016	14	ECO101
Aug 2016 - Dec 2016	14	ESC101
Jan 2017 - Apr 2017	11	MTH102
Aug 2017 - Dec 2017	9	CS201
Aug 2017 - Oct 2017	5	CS203
Jan 2018 - Apr 2018	11	MSO203
Jan 2018 - Apr 2018	12	ESO207

**Skills**

Programming Languages : C, C++, Python

**Projects**

1. *Depression Therapy Chatbot*: Implemented a retrieval-based, short conversation, closed domain chatbot using a Dual Encoder LSTM network and trained on the Ubuntu Dialog Corpus (UDC). Employed LSTM and word embeddings of prior context and responses to generate a prediction, applied the sigmoid function to obtain the required probability distribution of sampled responses.

2. *Competitive Machine Learning, Digit Recognition & Text Summarization*: Studied and implemented common Machine Learning Algorithms and Techniques. Solved the following problems on Kaggle: Titanic, Machine Learning from Disaster and Bag of Words using Scikit-Learn. Performed Recognition of Handwritten Digits on MNIST dataset using feed-forward neural networks, achieving 96% accuracy. Implemented RSS newsfeed summarizer using NLTK, Gensim (Word2Vec), Tf-Idf Algorithm and Networkx Package (Page Rank).

**Awards and Achievements**

- AIR 179 in JEE Advanced - 2016
- NTSE Scholar

**Hobbies**

- Sports: Basketball
- Quizzing
- Public Speaking/Oratory