# Siddharth Mittal

## JUNIOR UNDERGRADUATE · COMPUTER SCIENCE AND ENGINEERING Indian Institute of Technology (IIT), Kanpur

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#### Education \_

#### **Indian Institute of Technology Kanpur**

Kanpur, India

BACHELOR OF TECHNOLOGY, COMPUTER SCIENCE AND ENGINEERING

2015-2019 (Expected)

• Cumulative Grade Point Average: 9.4/10.0

### **Honors & Awards**

2017	Academic Excellence Award, For exceptional academic performance for year 2015-16	IIT Kanpur
2015	All India Rank 1510, Joint Entrance Examination Mains, 1.5 million candidates	India
2015	All India Rank 1988, Joint Entrance Examination Advanced, 150,000 candidates	India
2015	All India Rank 857, Kishore Vaigyanik Protsahan Yojana	India
2015	Selected for INSPIRE, Department of Science and Technology	India

## Experience \_\_

#### **Indian Institute of Science**

LEAP LAB, PROF. SRIRAM GANAPATHY github.com/smittal6/leap-scd/

May-July 2017

- The goal was to develop a speaker independent, real time speaker change detection system
- Synthetic data set was created from TIMIT corpus
- Different models were proposed which used combinations of features and classifiers
- Experiments were carried out and reasonable accuracy was achieved on test set

## Projects \_

#### **Automatic Image Captioning**

IIT Kanpur

Course Project, Machine Learning (Ongoing), Prof. Purushottam Kar

September 17 - Present

- Implemented model for captioning the images based on Show and Tell paper.
- Currently, we are experimenting with different architectures for the model.

**Smart Surveillance** 

IIT Kanpur

Undergraduate Project (Ongoing), Prof. Medha Atre

August 17 - Present

• Working on a model to detect anomaly based on feed from several surveillance cameras

**NachOS** IIT Kanpur August 17 - Present

COURSE PROJECT, OPERATING SYSTEMS (ONGOING), PROF. MAINAK CHAUDHARY • Implemented syscalls for Fork, Exit, Exec, Sleep

• Implemented standard Unix process scheduling algorithms

IIT Kanpur

## **Assorted Machine Learning**

SELF

• Created a neural network from scratch

- Implemented sentiment analysis on the Movie Review Imdb database, using the bag of words model
- Coded Generative Adversarial Network (GAN) in Tensorflow

# Extracurricular Activity \_

## **Counselling Service**

IIT Kanpur

STUDENT GUIDE

July '16 - Apr '17

- Personally helped 5 freshers adjust to the rigours of college life
- Assisted in conducting Orientation for more than 800 incoming students

### **Programming Club**

IIT Kanpur Apr'16 - Apr'17

• Assisted in organizing Freshers' Programming Contest in August '16

Responsible for dissemination of information regarding summer projects offered by Programming Club

#### Skills

**SECRETARY** 

**Programming** C/C++, Java, Python, Keras, Tensorflow

**Web** HTML, CSS (Bootstrap)

**Utilities** Git, Vim, Shell Scripting, R, Matlab/Octave, ŁTFX

# **Relevant Courses**

Introduction to Programming Abstract Algebra Data Structures and Algorithms Probability and Statistics (A\*) Tools for Computing Discrete Mathematics Computer Organization Operating Systems\*

\*: Course in progress, A\*: For outstanding performance

Linear Algebra & ODE Logic for CS Theory of Computation\* Intro to Machine Learning\*