

SAYAN GUHA

C-236,BR AMBEDKAR HALL,IIT KHARAGPUR

(9474052976 ◇ sguha@iitkgp.ac.in)

EDUCATION

Indian Institute of Technology Kharagpur

July 2016 - Present

Senior Undergraduate

Overall GPA:8.84 /10,Additional GPA:9.4/10

Department of Mining Engineering

Pursuing Minor in Computer Science and Engineering

Burnpur Riverside School

2013-2015

Secured 94.4 percent in Class XII Board Exams conducted by CBSE

St.Patrick's School

2002-2013

Secured 95.83 percent in standard X Board Exams Conducted by ICSE

TECHNICAL STRENGTHS

Computer Languages

C++,Python

Operating Systems

Windows

Software

Lucene,NLTK,Scikit-Learn,TensorFlow,NetworkX,Keras,LATEX

RESEARCH EXPERIENCE

IIT KHARAGPUR

May 2018-September 2018

Project in Information Retrieval using Social Media Data

- Under the supervision of Prof.Pabitra Mitra ,a project to gain actionable insight in Disaster scenario by classifying Need and Available tweets.
- Use of NLTK and Lucene to automatically classify Needtweet and Availability tweets from twitter data during Nepal Earthquake 2015 by using tf-idf features
- Building machine learning models such as SVM,Naive Bayes to further improve the classification task

Machine Intelligence Unit-ISI Kolkata

May 2019-July 2019

Internship in Computer Vision

- Under the supervision of Prof.B Umashankar ,a project in Multilabel Classification of Diseases of Thorax with NIH chest X ray using Transfer Learning
- Use of Pre trained Deep Learning Image Net Models such as DenseNet,ResNet and InceptionNetV3 for transfer learning task
- Usage of global average pooling layer and fine tuning the networks using ADAM optimizer
- Comparison of the AUROC Scores for different architectures
- Report of the Internship [https://github.com/Sayan7782/NIH-CHEST-X-RAY/blob/master/CS501R_Assignment_Template__3_\(3\)_removed.pdf](https://github.com/Sayan7782/NIH-CHEST-X-RAY/blob/master/CS501R_Assignment_Template__3_(3)_removed.pdf)

IIT KHARAGPUR

Ongoing

Project in Sentiment Analysis

- Under the guidance of Prof.Sourangshu Bhattacharya, Target based Sentiment Analysis of sentences in LAPTOP,REST and TWITTER datasets
- Improvement over T-Net by incorporating knowledge Graph and Graph Convolutional Networks.

IIT KHARAGPUR

July-2019-Ongoing

Project in Using AI for Legal Assistance

- Use of Dual Embedding Model <https://arxiv.org/abs/1602.01137> to rank documents
- Use of Word2Vec for getting Word Embeddings
- Finding similarity by computing cosine similarity between query vector and document vector
- Link to my Github Profile <https://github.com/Sayan7782>

ACADEMIC ACHIEVEMENTS

DEPARTMENT RANK-1 among all B.tech and Dual Degree undergraduate students of Mining Engineering Department of IIT Kharagpur.

Secured a ALL INDIA RANK OF 5606 among 1.3 million candidates(99.56 percentile) in JEE Examination for admission to IIT Kharagpur.

Secured a rank of 505 in State ENGINEERING Examination among 105000 candidates(99.51 percentile)

Stood 1st in school in Standard 10 board examinations(95.83 percent)

RELEVANT COURSES

RELEVANT COURSES:Programming and Data Structures(Theory and Lab),Probability and Statistics,Image Processing,Natural Language Processing,Safety Analytics,Machine Learning,Information Retrieval,Economics,Basic Electronics(Theory and Lab),Linear Algebra and Basic Numerical Techniques (Maths2),Algorithms and Switching circuits

POSITION OF RESPONSIBILITY

Sports Secretary - BR Ambedkar Hall of Residence

August 2017 - April 2018

- Spearheaded various sports team in inter hall activities with the football team securing gold and other team putting in commendable performances.

EXTRA-CURRICULAR

Secured Gold in Inter School Football tournament and Inter Hall Football.

Participated in Inter Hall Data Analytics Competition and Impulse,Annual fest organised by Electrical Engineering Department,IIT Kharagpur.