



EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2019	M.TECH	IIT Kharagpur	8.48 / 10
2017	Bachelor of Engineering	Indian Institute of Engineering Science and Technology, Shibpur	7.83 / 10
2013	Indian School Certificate Examination 2013	Council for the Indian School Certificate Examinations, New Delhi	90.5%
2011	Indian Certificate of Secondary Education Examination 2011	Council for the Indian School Certificate Examinations, New Delhi	85.142%

SKILLS AND EXPERTISE

PRIMARY SKILLS:-

C, C++, Python, PostgreSQL, MySQL, HTML(5), CSS, PHP, LISP, PROLOG, Apache Server, Neuroph, Keras, Tensorflow, Scikitlearn, Scikit-image, NetworkX, Hadoop, Java.

OTHER SKILLS:-

1. Competitive coding(Hackerank, CodeVita).
2. Learning and solving Machine learning based problems.
3. Keen observer and focussed decision making.
4. Ranked in the top 1 percentile of GATE-2017.

PROFILE:

Linkedin Profile:-

<https://www.linkedin.com/in/aniket-deroy-a65659102/>

Hackerrank profile:-

<https://www.hackerrank.com/swarojini1>

Github profile:-

<https://github.com/deroy007>

Kaggle profile:-

<https://www.kaggle.com/aniketderoy>

PROJECTS

1. TOPIC IDENTIFICATION USING UNSUPERVISED SYLLABIC SEGMENTATION APPROACH IN SPEECH DOCUMENTS(UNDER PROFESSOR K.S. RAO):

This project involves a syllable-based approach to unsupervised pattern discovery from speech. We first segment speech into syllable like units. The syllable tokens are then described using a set of features and clustered into a finite number of syllable classes. Finally, recurring syllable sequences or individual classes are treated as word candidates. We would then classify the speech documents into topicwise clusters.

2. DIGIT RECOGNITION USING MACHINE LEARNING AND DEEP LEARNING ALGORITHMS:

We collected the MNIST dataset from Kaggle and used machine learning and deep learning techniques and then analysed the results. We also used the handwritten digit dataset from scikit-learn and applied machine learning techniques on it to analyse the results.

3. DOCUMENT SUMMARIZATION(UNDER PROFESSOR PAWAN GOYAL):

We had large amounts of data present on various range of topics. We used the Lexrank(Textrank) algorithm and the Degree Summarization algorithm to find out the summary corresponding to every topic. Then we compared this summary to the Gold standard summary to find out the precision, Recall and F-Score.

4. BUILDING A BASIC CALCULATOR FOR ANDROID SYSTEMS:

We build a Basic Calculator for android system using the python package Kivy.

5. PREDICT SURVIVAL IN THE TITANIC DISASTER USING MACHINE LEARNING ALGORITHMS:

We collected the dataset for this project from Kaggle In this project we analyse what sorts of people were likely to survive. in the titanic disaster. We apply the tools of machine learning to predict which passengers survived the tragedy.

6. CLASSIFICATION TASK OF BREAST CANCER DATASET USING MACHINE LEARNING ALGORITHMS:

We analysed a breast cancer dataset collected from UCI Machine learning repository and analysed the dataset to perform a classification task of whether breast cancer would return back after being treated using various machine learning algorithms.

7. SENTIMENT ANALYSIS OF MOVIE REVIEWS(UNDER PROFESSOR SUSANTA CHAKROBORTY):

We collected movie reviews from a movie review dataset of multiple movies. We then performed sentiment analysis on these reviews to detect the positive and negative sentiments using word matching approach, naive bayes for text processing approach and a formula based approach and compared the results. Then we finally found out the summary of the reviews using graph based summarization.

8. STUDIES ON VARIOUS CRYPTOGRAPHIC TECHNIQUES AND THEIR CRYPTANALYSIS(UNDER PROFESSOR MALAY KULE):

We studied various basic cryptographic techniques and then we analysed the One time pad algorithm in details. We also implemented the modified one time algorithms. Then we studied the evolutionary algorithm known as Genetic algorithm and used this algorithm to perform cryptanalysis of One time pad using Genetic algorithm.

9. HAPPINESS INDEX USING FACEBOOK(UNDER PROFESSOR V.N. GIRI)

We calculated the happiness index of IIT KGP students using the confession page of IIT KGP on particular topics related to happiness, compassion and empathy. We then compared this results with the manual survey based approach and found out both similarities and differences in the results of the two approaches.

COURSEWORK INFORMATION
1. Machine learning 2. Advanced Machine learning 3. Information Retrieval 4. High Performance Computer Architecture 5. Social Computing 6. Design and Analysis of Algorithms 7. Foundations of Computing Science 8. Artificial Intelligence 9. Cloud Computing 10. Operating System 11. Database Management System 12. Introduction to networking 13. Data Mining

CERTIFICATIONS
1. INTRODUCTION TO R: A introductory course on the R programming language which is primarily used for data science. (Link:- https://www.datacamp.com/profile/roydanik18)
2. LEARN HTML: A basic course to learn HTML which is used for website development. (Link:- https://www.codecademy.com/objectMaster22705)
3. LEARN CSS: A basic course to learn CSS which is used for website development. (Link:- https://www.codecademy.com/objectMaster22705)

POSITIONS OF RESPONSIBILITY
1. Teaching Assistant We worked as Teaching Assistant in the course "INTRODUCTION TO INTERNET".

EXTRA CURRICULAR ACTIVITIES
1. Dancing. a. Finished Bharatnatyam till 3rd year. b. Finished Rabindra-Nritya till 4th year. c. Finished Folk Dance till 3rd year. 2. Completed Recitation till 3rd year. 3. Keen to learn about Spirituality and Indian mythology(Completed the Art of living foundation course). 4. Sports-Cricket, Football, Chess.