

Anurag Roy

COMPUTER SCIENCE UNDER-GRADUATE AT IEST SHIBPUR

43 A, Avenue South, Santoshpur, Kolkata-700075, West Bengal, India

☎ (+91) 7278389228 | ✉ anu15roy@gmail.com | 🏠 ranarag.github.io | 📱 ranarag

*"Our machines are dumb,
We are just trying to make them less dumb."*

Projects

Clustering Techniques

Dr. Jaya Sil, IEST Shibpur

ANALYSIS OF VARIOUS CLUSTERING ALGORITHMS

May. 2015 - Jul. 2015

- Implemented K means, K median, Hierarchical, parallel K means, DBScan algorithms from scratch in python
- Implemented Dunn Index and Davies index for evaluating the clustering models in python
- Analyzed the accuracy of the algorithms on various well-known datasets.

Sleeping Beauties in Computer Science

Dr. Saptarshi Ghosh, IEST Shibpur

CHARACTERIZING SLEEPING BEAUTIES IN COMPUTER SCIENCE

March. 2016 - Exp. Oct. 2016

- Analyzed the patterns followed by sleeping beauties in computer science

Summer Intern at CNERG, IIT Kharagpur

Dr. Niloy Ganguly, IIT Kharagpur

UNDERSTANDING RELATIVE IMPORTANCE OF CONTENT AND RESPONSES ON COMMUNITY SURVIVAL IN REDDIT.

May. 2016 - Jul. 2016

- Developed an on-line survey application in flask and jinja to create the training set from the reddit data.
- Used machine learning models to evaluate accuracy.

Deep Learning in NLP at IIT Kharagpur

Dr. Sudeshna Sarkar, IIT Kharagpur

DESIGNING AN EFFICIENT BENGALI-HINDI TRANSLATOR USING DEEP LEARNING.

Jun. 2016 - Jul. 2016

- Implemented Mikolov's recurrent neural network language model in python.
- Implemented a neural machine translation model in python.

Microblog Retrieval in a Disaster Situation: New Test Collection for Evaluation

*Dr. Saptarshi Ghosh, IEST Shibpur &
Dr. Kripabandhu Ghosh, ISI Kolkata*

RETRIEVAL OF TWEETS RELEVANT TO A GIVEN TOPIC USING DEEP LEARNING

Jul. 2016 - Oct. 2016

- Implemented unsupervised deep learning techniques to retrieve topic relevant tweets.
- Paper accepted at **SMERP 2017**.

A Novel Word Embedding Based Stemming Approach for Microblog Retrieval

*Dr. Saptarshi Ghosh, IEST Shibpur &
Dr. Kripabandhu Ghosh, ISI Kolkata*

NEW STEMMING ALGORITHM

Oct. 2016

- Designed a new stemming algorithm.
- The algorithm can help stem words which was not possible by rule based stemming algorithm.
- Paper accepted at **ECIR 2017**.

A language independent stemming algorithm

*Dr. Saptarshi Ghosh, IEST Shibpur &
Dr. Kripabandhu Ghosh, IIT Kanpur*

NEW STEMMING ALGORITHM

Dec. 2016-May 2017

- Designing a new stemming algorithm.
- The algorithm can help stem words based on their contextual meaning.

Summer Intern at IIT Kanpur

*Dr. Saptarshi Ghosh, IEST Shibpur,
Dr. Arnab Bhattacharya, IIT Kanpur
& Dr. Kripabandhu Ghosh, IIT
Kanpur*

A LANGUAGE INDEPENDENT MORPHOLOGICAL CLUSTERING ALGORITHM

May 2017 - June 2017

- Designing a new clustering algorithm to capture the morphological variants of a word in a noisy corpus.

Information Retrieval from Multiple Sources

*Dr. Saptarshi Ghosh, IIST Shibpur,
Dr. Kripabandhu Ghosh, IIT Kanpur
& Dr. Parth Gupta, Amazon India*

March 2017 - May 2017

A NEW NN MODEL TO RETRIEVE RELEVANT INFORMATION FROM MULTIPLE SOURCES

- Designing a new NN model for retrieval of documents relevant to given queries.
- Coded in Tensorflow(python).

Education

IIST Shibpur

Howrah, West Bengal

B.E. IN COMPUTER SCIENCE AND TECHNOLOGY

Aug. 2013 - 2017

- CGPA 8.13

Army Public School

Ballygunge, Kolkata

CLASS XII IN SCIENCE WITH COMPUTER APPLICATION

- 83 % (CBSE)

The Fure Foundation School

Tollygunge, Kolkata

CLASS X IN SCIENCE WITH COMPUTER APPLICATIONS

- 92 % (ICSE)

Co-curricular Activities

Classified(machine learning event)

INSTRUO 2016, IIST

ORGANIZER

- Collected twitter data for the contest.
- Cleaned and organized the data into csv files.
- Developed a scoring methodology for the contest.
- Analysed the codes submitted by the participants.

Robodarsan(Robotics club of IIST Shibpur)

IIST, Shibpur

MEMBER

May. 2014 - Aug. 2015

- Designed a remote controlled Quadcopter.
- Designed a light and line follower.

Technical Skills

Programming Languages and Tools, C, C++, Python, MySQL, SQLite, tensorflow, theano

Areas of Interest, Data Science, Information Retrieval, Natural Language Processing, Machine Learning, Deep Learning, Big Data

TECHNICAL PROFILES

Hackerearth, www.hackerearth.com/users/anu15roy

github, <https://github.com/ranarag>

References

Dr. Saptarshi Ghosh

IIT Kharagpur

IIST Shibpur

ASSISTANT PROFESSOR, IIT KHARAGPUR

Oct. 2015 - present

- Link: <https://sites.google.com/site/saptarshighosh/>
- Contact No: +91 9433292655