

Nikhil Agrawal

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EDUCATION

IIT-KHARAGPUR

M.TECH IN COMPUTER SCIENCE
May 2019 | Kharagpur, India
CGPA: 8.93 / 10.0

IET-DAVV

B.E IN COMPUTER SCIENCE
May 2017 | Indore, India
Percentage: 77.33

CHRIST JYOTI SCHOOL

SSCE, CBSE
May 2013| Satna, India
Percentage: 89.0
SSE, CBSE
May 2011| Satna, India
CGPA : 9.8/10

COURSEWORK

POST-GRADUATE

- Machine Learning
- Information Retrieval (*Teaching Asst 2x*)
- Deep Learning
- Language Processing for e-learning
- Scalable Data Mining
- Complex Network

SKILLS

PROGRAMMING

Over 10k lines:

- Python • C++

Over 2k lines:

- C • JAVA

Pytthon Libraries:

- Sckit-learn • Tensorflow • Keras
- Nltk • Pandas • Tensorflow Lite
- Pygraphviz • Matplotlib

Familiar:

- Android • MySQL

Miscellaneous:

- Anaconda • Spyder • Apache Spark
- StanfordCoreNLP • Solr • Source-Insight

LINKS

Linkedin | Github | Hackerrank | Kaggle

CERTIFICATIONS

ML | DL | Seaborn | Android

EXPERIENCE

SAMSUNG RESEARCH INSTITUTE BANGALORE | Senior Software Engineer

June 2019 - Present | Bangalore, India

CONVERGENCE BLUETOOTH | JAVA, ANDROID STUDIO

Many times users face difficulties in connecting to BT devices. We developed an AI-based model which can predict the different anomalies based on parameters obtained from settings page and guide user during BT problem.

5G NETWORK - NR MAC LAYER | C/C++

Primary responsible for the development of features responsible for first time connection establishment by user with the network through RACH channel. Implemented Beam Sweeping functionality where preamble are sent in different RO indices based on beam-Id.

PROJECTS

IMPROVING ASPECT BASED RANKING IN CLINICAL TRIALS - M.Tech Thesis

May 2018 – Apr 2019 | IR, NLP

Clinical Trials are crucial for the practice of evidence-based medicine. In this research work, we developed an automated method that can be applied across all classes of disease to retrieve relevant trials provided the disease information by the user as a query and relevant clinical trials as output ranked on different aspects.

FINDING THE INFLUENTIAL USERS IN THE TWITTER NETWORK

Jan 2018 – Mar 2018 | Complex Network

We used the temporal pattern of retweets combined with structural information of the network to identify the best set of influential users that can be targeted for viral diffusion in the Twitter network.

AUTOMATIC CONCEPT MAP GENERATION FROM TEXT-BASED LEARNING

MATERIAL Jan 2018 – Mar 2018 | IR, NLP

Generated a concept map from a document by first converting text to simple language, identifying important entities, finding the weighted relationship between entities, and then finally obtained a visual representation of the relations between entities.

CLUSTERING SIMILAR CONTENT IN LARGE DATA-SETS USING LSH

Sep 2017 – Nov 2017 | Scalable Data Mining

In this project, we found the similarity between all possible combinations in a large data-set that can be very time-consuming. To solve this problem, we have used Locality-sensitive hashing combined with Power Iteration Clustering.

APPAREL RECOMMENDATION May 2018 – Jul 2018 | ML, DL, NLP

Developed a recommendation system of apparels using content based on the calculation of weighted score (syntactic, semantic, and image similarity) between products that are obtained from Amazon real-world data-set.

AWARDS AND ACHIEVEMENTS

2019	top 5 percentile	Hackerearth-Mekkktronix Sales
2017	top 197/97k	The Graduate Aptitude Test in Engineering (GATE)
2013	1 st rank	District level Maths Olympiad

PUBLICATIONS

- [1] S. Roy, K. Rudra, N. Agrawal, S. Sural, and N. Ganguly. Towards an aspect-based ranking model for clinical trial search. In *International Conference on Computational Data and Social Networks*, pages 209–222. Springer, 2019.