Swapnil MANE

Research Scholar | Indian Institutes of Technology Jodhpur

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Department Computer Science and Engineering, Indian Institute of Technology(IIT) Jodhpur, 342037

Current CGPA : 8.60

Pursuing a Ph.D. in social and language computing at the Indian Institute of Technology, Jodhpur. Currently researching in the domain of cyberbullying on social media, along with author behaviour.

EDUCATION

2021 **M.Tech - Computer Engineering**, College Of Engineering Pune. (Unitary technological university of the Government of Maharashtra), CGPA : 8.60

2019 **B.Tech - Computer Science and Engineering**, Rajarambapu Institute of Technology, Islampur. (An autonomous institute), CGPA : 7.22

EXPERIENCE

August 2021 – **Present**
Teaching Assistant, INDIAN INSTITUTE OF TECHNOLOGY, Jodhpur
- CSL3010 : Design and Analysis of Algorithms
- CSL6010 : Cyber Security

April 2021 – **July 2021**
Data Scientist Engineer, KEYDABRA INC., Atlanta, U.S.
Gone beyond data visualization, explored the hidden and important patterns in data so that company can capitalize on it by predicting outcomes, prescribing solutions, and helping make sense of how to improve digital footprints.
- Worked with natural language processing, machine learning and deep learning.

August 2019 – **July 2021**
Teaching Assistant, COLLEGE OF ENGINEERING, Pune
- Principles of Programming Languages

June 2020 – **August 2020**
Data Science Intern, ONEDOT ENTERPRISES PRIVATE LIMITED, Pune
Handled a data science project which comprised a political assessment model.

SKILLS

Technical Proficiency	Natural language processing, Social network analysis, Pattern analysis, and Machine intelligence.
Data Science Tools	Jupyter , Matplotlib, NLTK, Scikit-learn, TensorFlow, Weka.
Operating Systems	Microsoft Windows, Linux, Android.
Documentation	LaTeX, Pack Office(Word, Excel, PowerPoint), LibreOffice.

AWARDS AND RECOGNITIONS

2019 Department of Computer Science and Engineering Excellence Award | Dr. Nagaraj Dharwadkar (HOD, CSE)
2019 Best student of the year Award | Dr. Sushma Kulkarni (Director, RIT)
2018 First in coding competition -CODE-IT | PVPIT
2018 Best Drama Director Award | Purushottam Karandak Kolhapur division

CERTIFICATIONS

2021 Applied Natural Language Processing, **NPTEL**
2021 Deep Learning, **NPTEL**
2020 Data Science Professional, **Coursera**
2020 NLP - Natural Language Processing with Python, **Udemy**
2020 Python for Data Science and Machine Learning Bootcamp, **Udemy**
2020 Prepare Manuscript, **Elsevier**
2020 Python (Basic), **HackerRank**
2019 Data Science using Python, **MITU Skillologies**
2017 Programming, Data Structure And Algorithms Using Python, **NPTEL**

Projects

Knowledge Distillation : Aggression Detection Using Mini BERT
Jan 2022 - Apr 2022

The knowledge is transferred from the BERT base to mini BERT (3-layers) using knowledge distillation, which is 7.5x smaller and 9.4x faster on inference.

Knowledge Distillation | Aggression detection | BERT | NLP

KnowldgeNet Relationship Classification Using a Pre-trained Model
Jan 2022 - Apr 2022

Relation classifier with new information on entity embeddings utilizing Pre-trained BERT. Over the state-of-the-art strategy, this suggested model achieves significant performance on the KnowldgeNet relational dataset.

Relationship classification | Entity Information | NLP

Analysis of Author's Abusive Behaviour Community on Twitter
Aug 2021 - Nov 2021

github.com/SwapnilSMane/SNA-Project

This project briefly analyzes the author's Abusive Behavior Network (ABN) by comparing it to the Normal Behavior Network (NBN). For analysis, the report uses social network analysis measures and effectively concludes that ABN has a densified network, information has spread rapidly, and much more. It also identifies the topics the author has been abusive on. This study will undoubtedly aid in distinguishing between the author's abusive and normal communities.

Author profiling | Hate speech | Community analysis | SNA

Contextual Journal Recommendation and Query Search Engine Using Word Embedding
Aug 2021 - Oct 2021

The proposed methodology will aid aspiring researchers in determining which journal to submit their work to for publication.

Context vector | Recommendation system | NLP

Polarity based Sarcasm Detection using Semigraph
Aug 2020 - Mar 2021

A variation of the semigraph is suggested in the pattern-relatedness of the text document. The proposed method is to obtain the sarcastic and non-sarcastic polarity scores of a document using a semigraph.

Sarcasm detection | Sentiment analysis | Semigraph | NLP

Thematic context vector association based on event uncertainty for twitter
Jul 2020 - Aug 2020

github.com/SwapnilSMane/Thematic-context-vector-association-based-on-event-uncertainty-for-twitter-

In this project, keywords are extracted using contextual events with the help of data association. The thematic context vectors for events are identified using uncertainty principle in the proposed system. The system is tested on the twitter COVID-19 dataset and proves to be effective. The system extracts event specific thematic context vectors from the test dataset and ranks them. The extracted thematic context vectors are used for the clustering of contextual thematic vectors which improves silhouette coefficient by 0.5% than state of art methods namely TF and TF-IDF. The thematic context vector can be used in other applications like Cyber bullying, sarcasm detection, figurative language detection etc.

Context vector | Twitter | NLP

Identification of Certain entities of each events from twitter
Jul 2020 - Jul 2020

github.com/SwapnilSMane/Identification-of-important-events-and-entities-from-the-document

This project proposed a method to derive uncertainty of entities in events with respect to context. The proposed method has been applied to the news dataset created using Twitter data and proves to be useful for identification of important events and entities from the document.

Twitter events | NLP

Exploring topics discussed in WhatsApp with sentiment and statistical analysis
Jul 2020 - Jul 2020

github.com/SwapnilSMane/Statistical-Analysis-of-WhatsApp-chat

Worked on a statistical analysis of the WhatsApp group chat. This will answer some general questions. Also, we build a sentiment analysis of personal and group chats. The sentiment of WhatsApp chat will give user-wise sentiment analysis. This will help you get the user's overall emotion during the chat.

Statistical analysis | Sentiment analysis | Topic modeling

Journals, conferences, and workshops

2021 Mane S., Khatavkar V., RESEARCHERS EYE-VIEW OF SARCASM DETECTION IN SOCIAL MEDIA TEXTUAL CONTENT, International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.9, Issue 8, pp.150-157, August 2021.

2021 Mane S., Khatavkar V., Researchers eye-view of sarcasm detection in social media textual content. In International Conference on Computing and Applied Engineering (ICCAE2021) [Presented]

2021 Mane S., Khatavkar V., Effective feature extraction for intrusion detection systems using non-negative matrix factorization and univariate analysis. In International conference SACAIM 2021 [Presented]

2018 Python and Android Application Development organized by the Walchand College of Engineering, Sangli. [Attended]

2016 High-Performance Computing organized by the Indian Institute of Technology, Bombay. [Attended]

Activities and Memberships

2021 Talk on "Basics of Machine Learning" Pimpri Chinchwad Polytechnic College Pune.

2019 - Present Member Institution of Engineering and Technology (IET) Pune.

2017 - 2019 Student cultural representative Rajarambapu Institute of Technology Islampur.

2016 - 2020 Member Indian Society for Technical Education (ISTE) Pune.

Programming Languages

Python3 ●●●●○

C++ ●●●○○

C ●●●○○

Known Languages

- English (Professional working proficiency)
- Hindi (Professional working proficiency)
- Marathi (Full professional proficiency)

Extracurricular Activities

Drama : acting, set design, and direction

Sport : badminton

References

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