# **Gurvinder** Singh Yadav

Analyst/ML Engineer











## **EXPERIENCE**

#### **DRIFT LAB INNOVATIONS** | Machine Learning Intern

July 2023 - Nov 2023

- → Developed the a langchain powered sales assistant with Llama2 and streamlit UI.
- → Created a Docker image with all the dependencies for the given models, Deployed them on Vast.ai instances.
- → Did a basic training of Vall-E and GradTTS using libreTTS dataset
- → Segmented and annotated speech data of multiple speakers for fine tuning using

#### INDIAN KNOWLEDGE SYSTEMS | RESEARCH INTERN

Nov 2022 - Dec 2022

- → Scraped data from world history & sacred texts website.
- → Configured and ran a multinode spark cluster and ran pattern mining algorithms and found relationships between verses, prefixes and there meanings.
- → Analysed the evolutionary pattern in these sacred text and tried to see how particular use of grammar, and vocabulary evolved over time.

# **PUBLICATIONS**

# **RECOMMENDATION SYSTEMS** | COLLABORATIVE FILTERING, MPIP, DASK DISTRIBUTED

- → Designed & optimised MPIP similarity technique to run on a distributed architecture in an asychronous manner with low memory footprint.
- → Published Research Article Link

#### **PROJECTS**

#### HATESPEECH ANALYSIS ON TWITTER USING APACHE SPARK | PYTHON, SCALA,

APACHE SPARK, DOCKER

- → Applied Linear Regression, Logistic Regression, SVM, BERT Transformer models on twitter hatespeech dataset.
- → Orchestrated an Apache Spark cluster using Docker and classified realtime twitter data into hateful and otherwise.

# GRAPH ANALYSIS OF TWITTER | PYTHON, PANDAS, NETWORKX

2022

- → Scraped, cleaned, preprocessed twitter tweets on the topics of major political leaders in India.
- → Created a graph of with leaders as node and used centrality (degree, eigen vector, closeness, betweeness etc.) to analyse the influence of political leaders and their polarising nature by classifing them into hatespeech.

### SKILLS

#### **PROGRAMMING**

Proficient: Python

Experienced:

Bash • SQL • Scipv

SQL • Sklearn

JavaSript • Shell • C Julia • Cpython • hive

### LIBRARIES/FRAMEWORKS

Pytorch • Spark

Sklearn • Numpy • Pandas

Numba • Dask • Selenium

Hadoop • Matplotlib

#### TOOLS/PLATFORMS

Git • Github • Vast.ai • Docker Google Cloud

#### **EDUCATION**

# INDIAN INSTITUTE OF IN-FORMATION TECHNOLOGY **DHARWAD**

BACHELOR'S DATA SCIENCE AND ARTIFICIAL INTELLIGENCE Dec 2020 - Present | Dharwad, Karnataka Data Science and Artificial Intelligence Cum. GPA: 8.19 / 10

#### REFERENCES

#### Sagar Raikar.

Speech Scientist Uniphore

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