Harshit Khandelwal (he/him/his)

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Linkedin Kaggle Github Website

EDUCATION:

Master of Science in Data Science Indiana University - Bloomington, IN **August 2021 - May 2023**

Bachelor of Technology in Computer Science Engineering

August 2015 - May 2019 CGPA: 8.26/10.0

Guru Gobind Singh Indraprastha University Maharaja Agrasen Institute of Technology, Delhi

WORK EXPERIENCE & INTERNSHIPS:

Accenture, Gurugram, India - Software Engineer

Aug, 2019- Aug, 2021

- Conducted system wide analysis and problem defining along with proposals of adequate solutions.
- Involved in testing and approval of the technological strategies for the product
- Completed Migration of application database from Mongodb to SQL
- Developed API's along with system integration and File management for application through AWS S3

Uniqgrid, Gurugram, India - Data Scientist Intern

Jun-Aug, 2019

- Worked directly under the CEO to develop analytical and predictive models for large scale mechanical machines using draft and testing data for field deployment.
- Built Semi-Productionalized and deployable ML system.

Aeologic Technologies Pvt. Ltd., Noida, India - SDE Intern

Jun-Aug, 2018

- Revamped the UX/UI of the app (Bull horns Panic Button)
- Designed and developed core features for a real-time helping Android application using Java
- Reduced time it took for location to get reported by approx. 10% (available in Google Play store)

TECHNICAL SKILLS:

Computer Languages: Python, R, Java, SQL, MongoDb

AI/Data Science
Machine Learning, Deep Learning (CV), Data Mining, Data Visualization
Software
Git, IPython, Jupyterlab, AWS, AWS S3, Alibaba cloud service, RStudio, Spark

Others: Excel, Tableau, Android, HTML, CSS, .Net Core, Dashboards (via Dash & Streamlit)

RESEARCH PAPERS:

- "Leveraging the power of quantum computing for breaking RSA encryption" (**Published**) Cyber-Physical Systems(Taylor & Francis) (Link to the paper)
- "Scalable Machine Learning in C++ (CAMEL)" (**Published**) International Conference on Innovative Computing and Communications pp 1063-1081(<u>Link to the paper</u>)

PROJECT EXPERIENCE:

Scalable Machine Learning in C++ (CAMEL) (Link: https://github.com/camelml/camel)

- Aimed to create a library that is purely developed in C++. Furthermore, Calculate the performance metrics of Compiled vs Interpreted Languages after developing the algorithms.
- Used the Scientific library "Armadillo", which helps us ease many math related functions and help us traverse the problem of dynamic matrix calculation instead of static coded matrices.

Recommendation Engine Project (Link: https://github.com/coderop2/recommendation system)

- Implemented Simple Generic Recommender, the Content Based Filter and the User Based Collaborative Filter. 'Surprise' library is being used which implements extremely powerful algorithms like Singular Value Decomposition(SVD) to minimize RMSE.
- Data scraped from TMDB API. Dummy & gradient boosting classifiers used as predictors for success of movies.

Native QnA Bot (Link: https://github.com/coderop2/Native-QA-Bot)

- Aim Develop a QnA bot which is light, fast & efficient in answering a question based on a document as context.
- No heavy ML/DL algorithm (like transformers) are being used to derive the answers. System achieves an accuracy of around 75% with basic NLP techniques.