Harshit Khandelwal

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Linkedin Kaggle Github Website

EDUCATION:

Master of Science in Data Science **Aug 2021 - May 2023**
Indiana University - Bloomington, IN, U.S.A **GPA**: 4.0/4.0

Bachelor of Technology in Computer Science Engineering **Aug 2015 - May 2019**
Guru Gobind Singh Indraprastha University, Delhi, India **CGPA**: 8.26/10.0

WORK EXPERIENCE & INTERNSHIPS:

Accenture, Gurugram, India - ***Software Engineer*** **Aug 2019 - Aug 2021**

- Conducted system wide analysis and defined problems along with proposals of adequate solutions.
- Developed API's along with system integration and File management for application through AWS S3
- Lead a team for migrating application database from Mongodb to SQL
- Developed an automation module to catch preemptive bugs and helped to avoid large sale breakdown
- Received 2 prestigious awards for my work and dedication to and for Accenture

Uniqgrid, Gurugram, India - ***Data Scientist Intern*** **Jun- Aug 2019**

- Worked with the CEO to develop analytical and predictive models/systems for large scale mechanical machines using draft and testing data for field deployment.

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 location detection (SOS feature) Android application
- 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, **Computer Vision**, Data Mining, Data Viz
Software **:** Git, IPython, Jupyterlab, AWS, AWS S3, Alibaba cloud service, RStudio, Spark
Others **:** **Excel**, Tableau, Android, HTML, CSS, .Net Core, Dashboards (via Dash & Streamlit)

PROJECT EXPERIENCE:

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

- Created a library that is purely developed in C++. On analysis of performance metrics between Compiled vs Interpreted Languages showed a significantly improved result and favor towards compiled languages.
- Used the Scientific library 'Armadillo', which helped us boost the performance of the algorithms by approx. 23%.

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.

Satellite Image Segmentation & Classification (Link: https://github.com/ajinkya98/DLSProject)

- Developed and Implemented a modified UNet architecture for the satellite image segmentation for segmenting the image into one or many of the classes, achieving an average IOU of 0.81 over the whole dataset.
- The 7D spatial encoded matrix from the segmentation model was used for natural event detection(like Landslide, Forest fire etc.). Achieving an 1.7% better result from state of the art implementation.

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(Link to the paper)