Vipul H. Harihar

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EDUCATION

Columbia University   New York, NY
M.S. in Data Science, GPA: 3.6/4.0   Sep 2021 – Dec 2022
- Courses: Algorithms for Data Science, Elements of Data Science, Applied Machine Learning, Exploratory Data Analytics
- Honors**:** Data Science Department Representative, Professional and Leadership Fellow

DIT University   Dehradun, IN
B.Tech. in Computer Science & Engineering, specialization in Big Data Analytics, GPA: 9.62/10 (Top 2%) Aug 2016 – May 2020
- Courses: Software Engineering, Artificial Intelligence, Relational Databases, Data Science, OOPs, and Engineering Mathematics
- Honors: Gold Medalist University Program Topper, Annual Excellence Award Scholarship-all 4 years

SKILLS & CERTIFICATIONS

Languages: Python, Java, R, SQL, HTML, CSS
Python Packages: NumPy, Pandas, SciPy, OpenCV, Scikit-Learn, Keras, TensorFlow, Matplotlib, Seaborn
Databases: MS SQL Server, AWS, MongoDB, Google BigQuery, Google Firebase
Data Visualization: Tableau, Power BI, R, Google Data Studio, IBM Cognos Analytics, ggplot2
ML Techniques: Classification, PCA, Sentiment Analysis, Time-Series, Cluster Analysis, Regression
Certifications: IBM Cognos, Data Analysis Using Python (IBM), Applied Data Science with Python-L2 (IBM), Microsoft Azure

PROFESSIONAL EXPERIENCE

IBM   Bengaluru, IN
Application Developer   Feb 2021– Aug 2021
- Managed 2 relational databases, performed data modeling and analytics for insights on more than 5500 data records for client.
- Solved and coded data repetition issue solution construct resulted in saving 2 hours and optimized data flow access.
Associate Systems Engineer   Jan 2021– Feb 2021
- Performed about 45 bug fixes on IBM software modules, collected and cleaned data sets.
- Completed more than 23 courses on IBM training in 29 days and became IBM Golden Employee 2021.

Indian Roads Safety Campaign, Solve Foundation   Dehradun, IN
Software Data Engineer - Policy Intern   Jul 2020– Dec 2020
- Developed predictive Machine Learning project to classify 75.86 mi² dangerous accident-prone area in Dehradun city.
- Supervised 6 team members to collect data and conduct data cleaning, and its predictive analytics for the project.
- Completed the project in 176 days and it got adopted by Non-Government Organization of Uttarakhand - Gram Welfare Society.

IBM   Dehradun, IN
Java Full Stack Developer - Intern   Feb 2020 – Jul 2020
- Created food delivery application aimed at serving food during Covid-19 global pandemic outbreak situation for 20+ restaurants.
- Led 5 interns to code restaurants statistics dashboard, performs and compute popularity and impressions in 47 days.
- Trained team of 6 members to perform complex SQL joins on 20 databases that facilitated regression analysis for project.

ONGC, Ministry of Petroleum and Natural Gas, Government of India   Dehradun, IN
Summer Scholar - Big Data Engineer Intern   May 2019 - Jun 2019
- Scraped open-source data on 5 news websites and leveraged filtering based on trending keywords.
- Pre-processed big data on Hadoop for 39 days to get insights on oil and its relevant news in media.

DATA SCIENCE PROJECTS

Columbia University   New York, NY
Enhanced Credit Card Fraud Detection- Multi Class Classification (Imbalanced Dataset)   Feb 2022 – April 2022
- Engineered a 3x faster single-click machine learning solution; automated classification algorithms using Gradient Boosting.
- Programmed data-agnostic codes for Logistic Regression, Naïve-Bayes, Decision Tree, and Random Forest algorithms in Python.
- Structured evaluation metrics: Recall Rate, and ROC-AUC values to detect optimized model for fraud multi-class classification.
- Conceptualized features and their importance in 5 team members to successfully classify imbalanced data of 9062 records.

DIT University   Dehradun, IN
Machine Learning based Imaging System for Roads Defect Inspection   Aug 2019 - Feb 2020
- Extracted and pre-processed 2000+ images to classify more than 38 potholes using OpenCV library in Python.
- Application worked in real time to give alerts to user when near reported potholes through application.
- Supervised a 3 members team to complete the project in 7 months and got appreciated by Vice Chancellor on Annual Project Fair.