

Vipul H. Harihar

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EDUCATION

Columbia University

M.S. in Data Science, GPA: 3.6/4.0

New York, NY

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

B.Tech. in Computer Science & Engineering, specialization in Big Data Analytics, GPA: 9.62/10 (Top 2%) Aug 2016 – May 2020

Dehradun, IN

- **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.