

Vipul Harashawaradhana Harihar

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EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Science

New York, NY

M.S. in Data Science, GPA: 3.541 / 4.0

Sep 2022 - Dec 2022

- **Courses:** Algorithms, Applied Machine Learning, Deep Learning, Statistics & Inferential Modeling, EDAV, Computer Systems
- **Honors:** Data Science Department Representative, Professional and Leadership Fellow, Course Assistant (Algorithms)

DIT University, School of Computing

Dehradun, IN

B.Tech. in Computer Science & Engineering, GPA: 9.62/10 (in Top 1% undergrad students)

Aug 2016 - May 2020

- **Courses:** Software Engineering, Artificial Intelligence, Relational Databases, Data Science, OOPs, and Engineering Mathematics
- **Honors:** Computer Science Program Topper Gold Medal and University Bronze Medal Awards and Scholarship Recipient

SKILLS & TECHNOLOGIES

Languages: Python, Java, R, SQL, HTML, CSS

Python Packages: NumPy, Pandas, SciPy, OpenCV, Scikit-Learn, Keras, TensorFlow, Matplotlib, Seaborn

Databases: MS SQL Server, 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-Level 2 (IBM), Microsoft Azure

PROFESSIONAL EXPERIENCE

IBM (International Business Machines Corporation)

Bengaluru, IN

Application Developer

Feb 2021 - Aug 2021

- Managed 2 MySQL databases, queried 5500+ records for IBM client IKEA on monthly basis.
- Performed more than 45 bug fixes and resolved data duplication issue on IBM Pre-Accounting Module for the Data Accessibility.
- Assisted Senior Software Developers in IBM Sweden in migrating PAM Software to the Cloud on OpenShift.

Associate Systems Engineer

Jan 2021 - Feb 2021

- Sharpened Software Development Skills on Frontend, Backend and Middleware using Java, JavaScript, Data Structures Algorithms
- Completed training on '[Advanced Technologies](#)' in 29 days and became IBM Golden Employee 2021 (annual recognition to IBM hardworking employees) and promoted to Application Developer on the project with the client IKEA furniture, Europe.

Indian Roads Safety Campaign, Solve Foundation

Dehradun, IN

Internship: Policy Intern

Jul 2020 - Dec 2020

- Developed application to classify 75.86 mi² dangerous accident-prone area in Dehradun city using logical-coding and development.
- Supervised 6 team members to collect data and conduct data cleaning, and its predictive analytics for the project.
- Completed the social community project and got appreciation by NGO, Uttarakhand State India - Gramaya Welfare Society.

IBM (International Business Machines Corporation)

Dehradun, IN

Internship: Java Full Stack Developer Intern

Feb 2020 - Jul 2020

- Created delivery app using microservices in Spring Boot to solve food crisis in Covid-19 outbreak situation for 29 restaurants.
- Led 5 interns to code - Web based restaurants statistics dashboard, performs and compute popularity and impressions in 47 days.
- Trained the team 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

Internship: Summer Scholar - Big Data Engineer Intern

May 2019 - Jun 2019

- Created my first end to end web application to analyze company's profile on news media (5 open-source websites)
- Scraped open-source data using beautiful soup Python packages on 5 news websites and leveraged filtering on trending keywords.
- Pre-processed big data on Hadoop and used BigQuery (GCD) for 39 days to get insights on oil and its relevant insights from data.

DEVELOPED PROJECTS

Columbia University

New York, NY

Enhanced Credit Card Fraud Detection- Multi Class Classification (Imbalanced Datasets)

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.
- Supervised a 3 members team to complete the project in 7 months and got appreciated by Vice Chancellor on Annual Project Fair.

All my projects and work contribution can be viewed on my GitHub Profile : github.com/virslaan