Abhishek Venugopal

IIT Madras | Data Analyst role

A graduate of IIT Madras with a passion for solving real-world problems through constant learning and research in the data science and analytics domain. A quick learner with strong work ethics having the ability to adapt seamlessly to a multi-disciplinary work environment. Proficient in Python programming and libraries, SQL queries, data analysis and visualization and machine learning algorithms.

✉ abhishekvpta@gmail.com   📱 +91 8075364365   in linkedin.com/in/abhishekiitm   github.com/AbhishekatGithub/Abhishek1996

EDUCATION

BS-MS in Biological Sciences(Dual Degree)
IIT Madras | Chennai
07/2015 - 07/2020   *7.22/10*

Class 12 Certificate (CISCE)
KEEMS | Kottayam
05/2013 - 05/2015   *92%*

EXPERIENCE

Data Science Intern
Flinkhub | Online creator community
05/2021 - Present

- Selected as an intern in **data science** group based on profile and experience among **200+** applicants through LinkedIn
- Effectively contributing as a team member on competitions with real-world data,conducting extensive **exploratory data analysis** and implementing various **machine learning algorithms** and pipelines

Super Coordinator WebOps
Biotech Student's Association | IIT Madras
01/2019 - 04/2019

- Effectively handled the registration and communication to all participants of Biofest'19 which saw a footfall of **400+** participants using **MySQL and Excel** spreadsheets.
- Coordinated two technical workshops on Computational biology and Protein Visualization which saw a footfall of **100+** attendees.

Summer Research Intern
IISc | Bengaluru
04/2019 - 06/2019
Guide : Prof. Siddhartha P Sarma, Molecular Biophysics Unit , IISc

- Successfully completed the project "Expression, purification and NMR study of Cytochrome b5 protein"
- Accomplished high quality protein purification(99%) and obtained a high confidence SEC in the first attempt and conducted 1D-NMR analysis of the peptide product.

Summer Research Intern
IISER | Thiruvananthapuram
04/2017 - 06/2017
Guide: Dr. Ramanathan Natesh, Molecular Biology Lab, IISER TVM

- Completed the project "Expression, purification and crystallization of Gre-factor homologs and structure determination using X-ray crystallography"
- Purified Gre factors 1 & 2 (proteins involved in DNA backtracking) to high quality(99%)and prepared crystals using vapor diffusion method.

SKILLS

Data Structures and Algorithms   Python   Java

Machine Learning Libraries   Machine Learning algorithms

Data cleaning   Data Visualization   SQL/MySQL

Tableau   MS Office Tools   Statistical methods

Jupyter Notebook   Data mining   Flask   Research

PROJECTS

Login system using python tkinter and SQL ⧉
- Created a functional **GUI based employee login/registration system** using tkinter and **mySQL connectivity** through python for authentication, with appropriate display of error messages

Exploratory Data Analysis of COVID-19 in India ⧉
- Scrapped the **dynamic COVID-19 medical data** of State/Union Territories from Wikipedia. Rendered an interactive zoom-able map using **Folium library** alongwith insightful **visualizations** of the statistics of the pandemic

Electronic items sales data analysis using Pandas ⧉
- Extracted sales data of electronic items in US states in 2019 (from GitHub) and derived useful business insights and answered relevant questions which can translate to improved business through **data-driven analysis** using **Pandas** and **Seaborn**

E-commerce products classification using LightGBM and OPTUNA ⧉
- Conducted **EDA** and **feature selection** in a highly **imbalanced** dataset containing **0.1M** records and **48** right skewed categorical features
- Experimented with **SMOTE**, data transformation and outlier detection techniques and prepared the data for **Random Forest**, **XGBoost** and **LightGBM** using **OPTUNA** hyper-parameter optimization with **20** trials.
- Achieved the best **log loss** score of **1.086** with LightGBM model, placing it in the **top 25 %** of all predicted models in Kaggle

ACTIVITIES & ACHIEVEMENTS

IITM Chess Club
Hostel team selector and Captain , 2020

National Service Scheme(NSS)
Volunteer for events and projects ,2016

Best outgoing student, ICSE 2013
Regional science and math topper, school topper

Qualified GATE 2019 Biotechnology
Recieved Half Time Teaching Assistanship Scholarship in senior year

INTERESTS

Data science   Chess   Badminton   Technology

Music   Writing