# Pankaj Kumar Yadav

Dedicated data science enthusiast with a strong desire to use data to discover and solve business problems. Proficient in predictive modeling, data processing, data mining, problem-solving thinking and creativity in identifying solutions.



dev.pankajkumaryadav@gmail.com



in linkedin.com/in/pankaj-kr-yadav



github.com/yadavkumarpankaj

## **WORK EXPERIENCE**

# **Data Science Trainee**

AlmaBetter School

05/2022 - Present

Bangalore, India

Key Responsibilities and accountabilities:

- o Gained in-depth understanding of skills such as Python, SQL, and Machine Learning improved story-telling skills by delivering presentations or visualizations regarding insights generated while working on projects
- Efficiently used tools such as Google Colab, Tableau, and PowerBI to implement real world projects such as EDA on World Bank Global Education Analysis, Yes Bank Stock Closing Price Prediction etc. Worked on SQL case studies like Danny's Diner etc.
- Achieved Star Student Badge Award given to top four performers for working on individual project and demonstrating work through skillful presentations.

## **PROJECTS**

## **Online Retail Customer Segmentation**

AlmaBetter Verified Project

11/2022 - 12/2022

Tags: Clustering, K-Means, Hierarchical, RFM Score, Elbow Method, Silhouette Score, Pandas

- Developed clustering model to identify customer segments on retail transactional dataset to tailor marketing efforts .
- Explored data and created feature called RFM Score to know likelihood of customers purchasing again.
- Implemented K-Means to cluster data into 3 segments which was validated using elbow method and silhouette score of 0.3 showing samples in one cluster are close to their neighboring points from same cluster and far from other cluster.
- K-Means with 3 clusters helped improve marketing efforts & generate more sales.

#### **Cardiovascular CHD Risk Prediction**

AlmaBetter Verified Project

Tags: Logistic Regression, Classification, Hyperparameter Tuning, SVM, Random Forest.

- Developed classification model to predict ten-year risk of coronary heart disease for different age groups to build preventive methods against CHD.
- o Performed univariate, bivariate and multivariate analysis for detecting outliers and missing values, combined with feature engineering to draw out best set of inputs and fixed class imbalance via SMOTE.
- Performed random forest, support vector machine, xgboost, and logistic regression with cross validation(CV) algorithms with different evaluation metrics and applied hyperparameter tuning to them & predicted CHD risk with F1 score of 91 %.
- O Causes that are most likely to result in CHD are easily determined by doctors, and prevention of 10-year CHD can be suggested to patients and public.

## Yes Bank Stock Closing Price Prediction

AlmaBetter Verified Project

08/2022 - 09/2022

Tags: matplotlib, seaborn, linear regression, Lasso Regression, feature engineering, XGBoost, EDA

- Built regression model to accurately predict stock market returns that is highly volatile and non-linear in nature which lead to financial gain.
- Performed Exploratory data analysis, Imputed missing values, encoded categorical features, handled outliers, and checked multicollinearity combined with Feature engineering to identify optimal inputs.
- With introduction of machine learning, time series forecasting, and increased computational capabilities, programmed methods of prediction have proved to be more efficient in predicting stock prices
- o In this work we use linear regression technique, lasso regression, ridge regression, elastic net regression, and XGBoost Regression technique. these five models have used.

## TECHNICAL SKILLS

## Language, Database & ML Libraries

Python, SQL, Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, SciPy, Tensorflow.

#### Frameworks and Platforms

Jupyter Notebook, Google Colab, Postgre SQL, MySql, MS Word, MS Excel, Tableau, PowerBI, Github.

#### **Algorithms**

Linear Models, Decision tree, SVM, Ensemble Models, KNN, Naive Bayes, Clustering Algorithms, Recommendation System.

#### Professional Skills

Data Science, Data Engineering, Data Analytics, Business Analytics, ML Deployment

## COURSES

Full Stack Data Science (05/2022 - Present) & AlmaBetter School, Bangalore

Machine Learning (07/2022 - 10/2022) 🗷 Deeplearning.Al. Coursera

IBM Data Analyst (04/2022 - 09/2022) 🗷

## **ACHIEVEMENTS**

All Earned Badges From IBM and Coursera &

Earned Python and SQL certifications and gold badges from Hackerrank. G

## **PUBLICATIONS**

## **EDUCATION**

#### B.com

Indra Gandhi National Open University 06/2017 - 06/2021

## XII- Higher Secondary

R.N Singh Senior Secondary Public School

05/2015 - 06/2017

## INTERESTS

Workout

Gaming

Meditation