# Neeraja Debta

www.linkedin.com/in/neeraja-debta Portfolio: https://nirjadebta.github.io/Portfolio/

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#### **SUMMARY**

- MS in Computer Science from Franklin University.
- 2+ years of experience in data mining, data visualization, data processing and data modeling using various Machine learning algorithms to deliver insights and action-oriented solutions to complex business problems.
- In depth knowledge in descriptive statistics, regression analysis, predictive analytics, Hypothesis Testing(t Test, Z test, Anova Test), Sensitivity Testing, Cross Validation, Hyper Parameter Optimization, Regularization.
- Experience in **Extraction**, **Transformation** and **Loading** of data from Multiple Sources to Data Warehouse using **SSIS**.
- Experience in data visualization using Power BI, Tableau, and different python libraries(matplotlib, Seaborn, PLOTLY).
- In depth understanding of **Hadoop Architecture** including **YARN** and various components such as **HDFS** Resource Manager, **Node Manager**, **Name Node**, **Data Node**.
- Strong working knowledge with **Python** and database like **SQL Server, Oracle**.
- Experience in application development, design, version control, and automation testing.
- Knowledge of standard industry-specific **Agile** software development lifecycle and tools like **JIRA**.
- Good understanding of object-oriented programming languages like Java
- Solid understanding of **DevOps** and **CI-CD** practices.
- Administrative experience with Cloud platform like **Google Cloud**.
- Experienced with distributed version control using GitHub.
- Knowledge of Restful Web Service and SOAP.
- Understanding of QA best practices and experience in Selenium Automation testing.
- Strong work ethics in team or individual to drive product success and process efficiency.

### **SKILLS**

Languages Python, Java, HTMLDatabase MS SQL Server, MS Access

Statistical Analysis Hypothesis Testing, T-test, Anova Test, P-Value

Machine Learning
Predictive Modelling, Linear Regression, Logistic Regression,

Random Forest, Decision Tree, K Means Clustering, Naïve Bayes.

Reporting Tools
Power BI, Tableau

• Other Tools Anaconda, Jupyter Notebook, Spyder, Postman, Docker, ETL,

Eclipse, IntelliJ, NetBeans, Postman, Docker, Jira

Version Control Git,GithubSoftware Development Oops,SDLC

Deployment Google Cloud Platform, Heroku

Testing Espresso, Selenium

• **Version Control** Git, GitHub

# PROFESSIONAL EXPERIENCE

## Franklin University

Student Employee (Data Analysis and Visualization) Feb 2020 – Present, Columbus, OH

#### Web Development

• Developed a web application using **Python FLASK** to facilitate various administrative modules and publishing Dashboards for visual data analysis by extracting data from the database.

#### Web Automation

- Automated different manual processes (like- monitor Grading, Email responses, verify video contents)using Selenium Python bindings.
- Automated the editing process of a bulk amount of word documents using Python.

## **Data Mining**

- Performed ETL operation in SSIS for transforming data into Datawarehouse.
- Extracted data set related to Faculty Development offerings, programs, and special projects using SQL from the university database.
- Built useable codes in **Python** to automate data collection.

#### **Data Processing**

- Perform Data Cleaning, features scaling, features engineering using pandas and NumPy packages in python.
- Performed Initial data investigation and exploratory data analysis to identify patterns and trends.

#### **Data Visualization**

- Created reports and charts using Python Visualization libraries (**Matplotlib**, **Seaborn** and **PLOTLY**) to communicate findings/trends.
- Provided administrative support by creating dashboards and reports using Tableau and Power Bi for visual analytics of data.

#### **Data Modeling**

- Developed **NLP** model for Categorizing feedback given by students.
- Preprocessed data using NLTK library and implemented Multinomial Naïve Bayes Algorithm for classification.

# Wright State University

Volunteer Assistance Apr 2019 – Aug 2019, Dayton, OH

#### **Data Modeling**

- Worked under PHD scholars on Projects related to **statistical analysis** on a health care data.
- Assisted on a fine-grained **sentiment analysis** model on drug review data designated to identify polarity of specific target.

#### **Data Visualization**

- Assisted on a project to visually classify and grade regions based on their air quality index through the historical air pollution data set.
- Created documentations using PowerPoints and excel for business communications nd reporting.

# **ACADEMIC PROJECTS**

Franklin University, Columbus, Ohio

#### **Credit Card Fault Detection**

- Implemented different machine learning model like **Random Forest**, **Logistic Regression**, **K Nearest Neighbor** and **Decision Tree** for the Anomaly detection.
- Applied **Smote** technique to balance the datasets and improve the recall score.

#### **Flight Price Prediction**

- Created a prediction model using **Random Forest** Machine Learning Algorithm.
- Achieved 81% model accuracy.

# Web App using Restful web services jax-rs

- Developed a web application named "Distributed Gradebook"
- Multiple Course can be created and under each course, multiple student can be enrolled using **Restful web services** and **glassfish webserver** in **NetBeans**.
- Deployed the web application in multiple webservers using **Google cloud platform**.

### **UI Automation Testing of Android Application**

- Performed User Interface Testing for an Android app named "To-do List".
- Utilized Espresso testing framework to write UI test cases in Java using Android Studio.
- Executed Unit testing, Integration testing and exploratory functional testing

### **EDUCATION**

Franklin University | MS Computer Science (GPA:4.0)

Expected Graduation: May 2021, Columbus

Birla Institute of Technology | Master's in Nanoscience and Technology

2013 - 2015, Ranchi, India

C.V Raman College Of Engineering | Btech in Applied Electronics and Instrumentation Engineering.

2007 - 2011, Bhubaneswar, India