Chitral Puthran

Data Science | Machine Learning | Python

Career Summary

A proficient Python Programmer, specializing in Machine Learning, Data Visualization, and Data Preprocessing, with internship experience at Nokia Bell Labs in Data Science, and an active learner. A Graduate Research Assistant in Machine Learning and Big Data, with a Master of Science Degree in Computer Science from the University of New Haven, 2018. A Google Analytics Certified Individual, 2019.

Work Experience

Data Science and Machine Learning Intern

06/2018 - 08/2018

Nokia Bell Labs

- Assisted the research led by Dr. Abdol Saleh at Bell Labs Consulting, by programming Jupyter Notebooks for data extraction using APIs in Python with learning instructions and reproducible code snippets.
- Successfully collected time-series data from 1960 to 2017, for 140 macroeconomic indicators
 for 195 countries from The World Bank and International Labour Organization, and 256
 macroeconomic indicators for 40 countries from Organisation for Economic Co-operation and
 Development through APIs using Python, aggregated in 2 million+ data points.
- Program Files and Report.

Graduate Research Assistant

09/2017 - 12/2018

University of New Haven

- Developed a **Tweepy Streaming Engine** to collect live tweets about natural disaster situations and implemented a **context filtering model** to classify tweet with relevant, valuable information for disaster relief organizations and first responders.
- Program Files and Report.

Software Engineer

08/2019 - Present

Tata Consultancy Services

Relevant Projects

Drive Curve | ML Application

- Trained a Regression Model, on the Automobile Dataset from the UCI Machine Repository with the help of Scikit-learn, tuned the hyper-parameters for R2 score, with GridSearchCV, to predict the price of the car based on the features. in Python
- Developed a Web Application, with an easy to use UI with multiple dropdown list to enter feature values, for the regression model, with the help of Flask and deployed the Web Application to Heroku.
- Live link to the Web Application.
- View it on GitHub.

Wine Glass | ML Application

- Trained a Classifier on the Wine Quality Dataset from the UCI Machine Learning Repository, to classify the wine sample as good or bad, with the help of Scikit-learn, Pandas and treated imbalanced dataset with the help of SMOTE from imblearn in Python.
- Designed and deployed a Web Application, with user-friendly range sliders to insert features
 values, for the trained Machine Learning model to classify the wine sample given by the end
 user, with the help of Git, Flask, Bootstrap, and Heroku.
- Live link to the Web Application.
- View it on GitHub.

Skills

- Python
- · NumPy, Pandas
- Matplotlib, Seaborn, Plotly
- Scikit-learn, Keras, SHAP, lime
- Machine Learning, Scipy
- Data Visualization, Tableau
- SQL, MySQL
- SpaCy, NLTK
- Object-Oriented Programming (OOP) with Python.
- Git, Google Analytics

Certifications

- Google Analytics Individual Qualification - 2019
- Microsoft Technology Associate 2017

Scholarship

 Experiential Graduate Assistantship Program (EGAP) with 75% tuition fee assistance.

Completed Courses

- Machine Learning by Stanford University on Coursera
- Applied Machine Learning in Python by University of Michigan on Coursera
- Machine Learning A-Z™: Hands-On Python & R in Data Science
- Statistics for Business Analytics A-Z[™]
- Tableau 10 A-Z: Hands-On Tableau Training For Data Science
- Interactive Python Dashboards with Plotly and Dash
- Python for Data Science Tips, Tricks, & Techniques
- Building Deep Learning Applications with Keras 2.0
- Advanced SQL for Data Scientists
- Amazon Web Services Machine Learning Essential Training

Education

Master of Science in Computer Science

2017 - 2018

University of New Haven

Coursework: Python Scripting, Java Programming, Distributed Databases, Advanced Python in Data Science, Artificial Intelligence, Machine Learning, Web Database Application Development, Database Systems

Bachelor of Engineering in Computer Engineering

2013 - 2017

University of Mumbai

Relevant Courses: Distributed Database. Structured Programming Approach, Object-Oriented Programming Methodology, Data Structures, Database Management System, Analysis of Algorithms