# **Aparna V**

#### **Profile**

Data science and machine learning enthusiast seeking an opportunity to apply skills in the industry to meet challenging work assignments and to gain more theoretical as well as practical knowledge in the same.

## **Education**

2020 – 2022 MSc Computer Science-Geospatial Analytics

Thiruvanantapuram, Indian Institute of Information Technology and Management-Kerala

Kerala

2017 – 2020 BSc(Honors)-Physics

Anantapur, Sri Sathya Sai Institute of Higher Learning

Andhra Pradesh

#### Certificates

# IBM Data Science Professional Certificate

Professional certificate offered by IBM via Coursera. Consists of ten courses that include open source tools and libraries, Python, databases, SQL, data visualization, statistical analysis, predictive modelling and Machine Learning algorithms.

# **Python for Data Science**

A course offered by IBM via cognitive class which offers knowledge about the python libraries and tools useful in data analysis.

#### **Machine Learning in GIS**

Program offered by Udemy Learning Platform.
Learned about the different machine learning algorithms used for classification of land areas for the purpose of land cover monitoring and change detection analysis in the Geospatial industry.

# Skills

Data Analysis Data Visualization

Machine Learning Python programming language

SQL R programming language

Folium IBM Watson Studio

IBM Db2 ESRI ArcGIS

Google Earth Engine QGIS

HTML and CSS MS Office

## **Projects**

#### Applied data science capstone-SpaceX project

The SpaceX spacecraft launching company launches it's satellites with comparatively much lesser budget than other companies. The reuse of the first stage of the rocket is the reason for this reduced cost. The project aims at predicting whether the first stage of the Falcon 9 booster lands successfully in order for it to be reused, thus giving a chance for other spacecraft manufacturing companies, a chance to bid against SpaceX. The tools used: IBM Watson studio, IBM Db2, Plotly Dash, Folium.

#### Flood Mapping and Asset Damage Assessment

Mapping the flood prone areas of Ernakulam district by performing weighted overlay analysis in ArcGIS pro. Created a flood damage assessment tool in Google Earth Engine which assesses the damage caused to the cropland and urban areas using a Sentinel 1 change detection approach

## Geospatial Analysis of road accidents in Trivandrum-2019

Spatial Analysis of road accidents that have occured in the Trivandrum district in the year 2019 using python, R, ArcGIS pro, and QGIS

# **Machine Learning Applications in GIS**

Classification of land surface using machine learning algorithms using Google Earth Engine.

#### **Web Tracking program**

Program to store and track the list of sites along with the timestamp information while a person browses the internet.

#### Simulation using python

Simulation and animation of the working of a double pendulum using python and matlab.

#### **Professional Experience**

Gurugram, Haryana AI/ML Analyst

*Number Theory* 

Worked as AI/ML analyst in the sales wing to provide solutions to banking as well as

non-banking data science problems.

Interacted with clients in order to describe the provided solutions.

# Languages

Malayalam
 English

Hindi

Telugu

Tamil