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About

Data Analyst & Scientist skilled in transforming complex data into actionable insights. I analyze data to uncover patterns and opportunities, using creativity and problem-solving to design clear, engaging visual reports. With adaptability and a continuous learning mindset, I also build machine learning models for accurate predictions and smarter decision-making, always working in a helpful and collaborative way to turn raw numbers into strategies that drive success.



About

محللة وعالمة بيانات أمتلك خبرة في تحويل البيانات المعقدة إلى رؤى عملية. أقوم بتحليل البيانات لاكتشاف الأنماط والفرص، مستخدمة الإبداع وحل المشكلات لعرض تقارير بصرية واضحة وجذابة. بفضل قدرتي على التكيف وعقلية التعلم المستمر، أطور نماذج تعلم آلية للتنبؤات واتخاذ القرارات الذكية، وأعمل دائمًا بروح تعاونية لتحويل الأرقام إلى استراتيجيات تحقق النجاح.



Unique Value



- Continuous learning and critical thinking
- Technical skills in data analysis and machine learning
- Experience with data visualization and predictive modeling
- Strong communication and teamwork.



القيمة المميزة



عقلية تعلم مستمر وتفكير نبدي



خبرة تقنية في تحليل البيانات والتعلم
الآلي

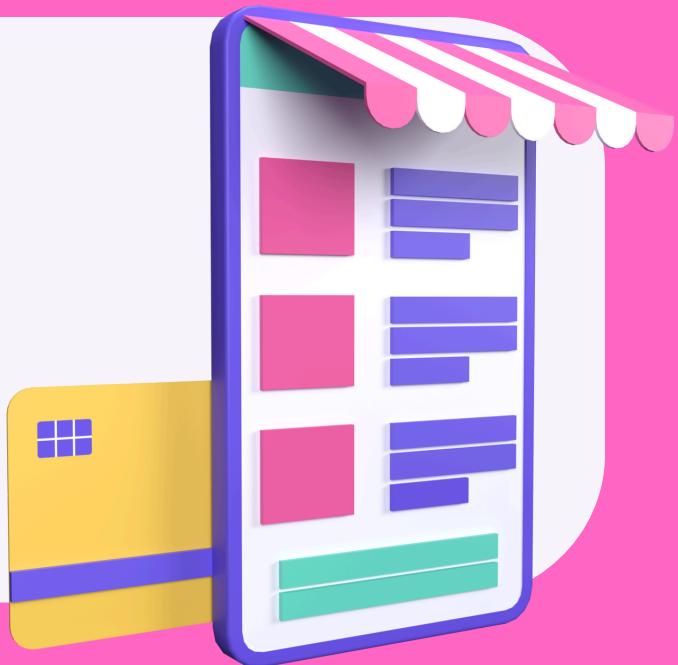


مع القدرة على عرض البيانات والتنبؤ
بالاتجاهات



مهارات قوية في التواصل والعمل
الجماعي

Services I Provide



Data
analysis



Data Entry



Machine
Learning



Administrative
Virtual Assistant

SKILLS

Programming:

Python

R

Java

C++

Data Science:

Data Analysis

Machine
Learning

Data Mining

Concepts

Mathematics

OOP

Data Structures

ETL

Tools

Microsoft SQL

Server

PowerPoint

Trello

NOSQL ,Excel

Canva

Soft Skills

Communication

Teamwork

Adaptability

Creativity

Continuous

Learning



DEPI, Skills Dynamix, Alexandria
July 2025 - Present (Current)

Experience



Data Engineering Intern



Gaining hands-on experience in building and monitoring dynamic data pipelines in real-world projects



Learning and applying Python, SQL, NoSQL, ETL processes, and web scraping to manage and transform data effectively.



Supporting data flow, transformation, and storage while improving infrastructure reliability.



Developing strong problem-solving and time management skills in a professional environment.



Software Testing Intern



Gained knowledge of software testing fundamentals, including testing roles, processes, and principles.



Studied Agile methodologies such as Scrum and Kanban, focusing on their concepts and use in project workflows.



Used Trello in a simulated setting to understand task management within Agile frameworks.

“ **EDUCATION**

Bachelor of Computer and Data Science

– Alexandria University

Expected Graduation: 2027

● CGPA: Excellent (in progress)

“

CERTIFICATIONS

AI Hackathon – Google Developers Group, Alexandria (2025) : Participated in a one-day hackathon, working under pressure to develop an MVP and present an innovative idea within a limited timeframe.

PROJECTS

CLIMATE ANALYSIS

Skills and deliverables

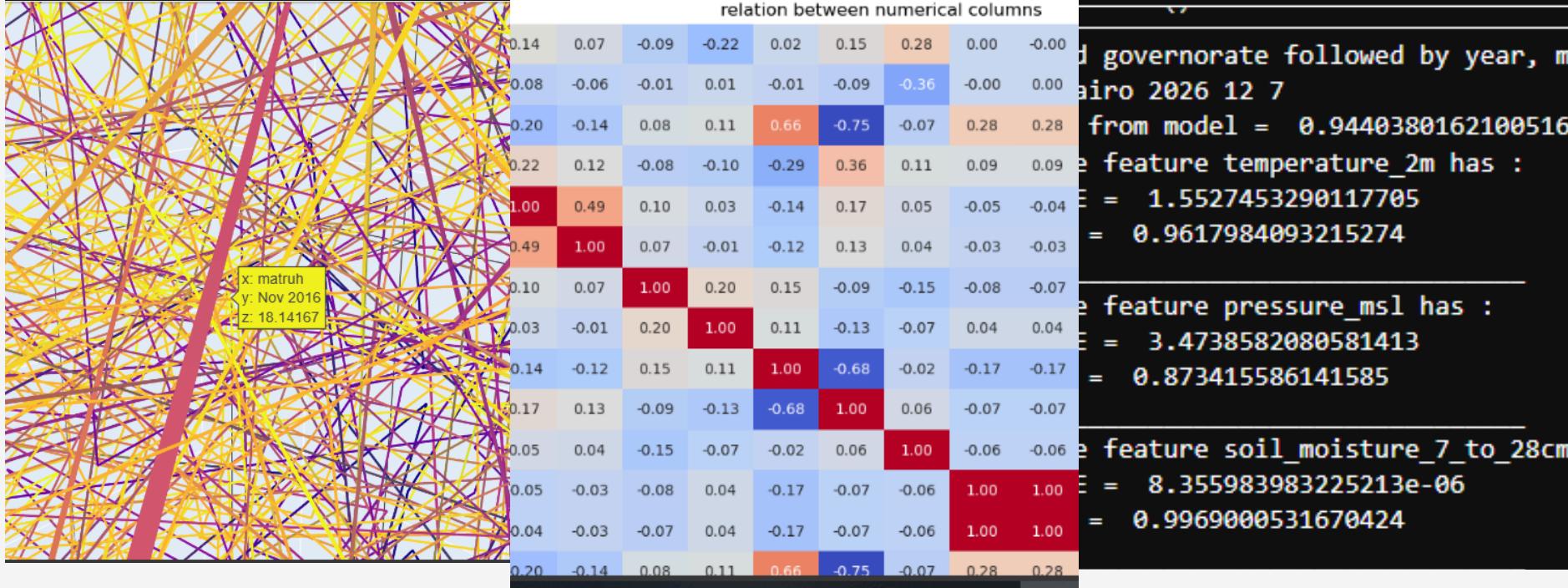
Machine Learning
Deep Learning
Python
Data Visualization

Project description

Performed API-based data collection, preprocessing, exploratory data analysis, and model training (LSTM reached 91.6% accuracy). Visualized spatiotemporal changes using TimestampedGeoJson to highlight climate patterns across Egypt.

My role

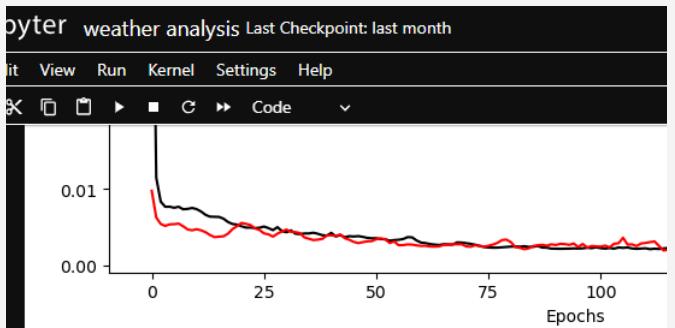
Built ML models (LSTM, Random Forest) to predict temperature using environmental data.



```
er weather analysis Last Checkpoint: last month
View Run Kernel Settings Help
File View Run Kernel Settings Help
poch 2/200
6/26 4s 162ms/step - loss: 0.0137 - val_
poch 3/200
6/26 4s 172ms/step - loss: 0.0087 - val_
poch 4/200
6/26 5s 185ms/step - loss: 0.0074 - val_
poch 5/200
6/26 5s 178ms/step - loss: 0.0076 - val_
poch 6/200
6/26 5s 165ms/step - loss: 0.0077 - val_
poch 7/200
6/26 4s 162ms/step - loss: 0.0081 - val_
poch 8/200
6/26 4s 171ms/step - loss: 0.0074 - val_
poch 9/200
6/26 5s 179ms/step - loss: 0.0074 - val_
poch 10/200
6/26 4s 165ms/step - loss: 0.0077 - val_
poch 11/200
6/26 4s 166ms/step - loss: 0.0077 - val_
poch 12/200
6/26 4s 171ms/step - loss: 0.0074 - val_
poch 13/200
6/26 4s 168ms/step - loss: 0.0068 - val_
poch 14/200
6/26 4s 162ms/step - loss: 0.0065 - val_
poch 15/200
6/26 4s 153ms/step - loss: 0.0065 - val_
poch 16/200
6/26 4s 158ms/step - loss: 0.0066 - val_

```

CLIMATE ANALYSIS

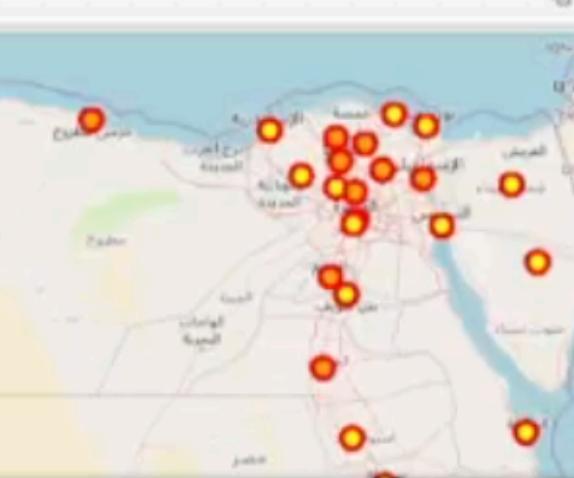


```
: model.save('my_model.keras')
keras.saving.save_model(model, 'my_model.keras')

finalmodel=load_model('C:/Users/El_manfy/Downloads/my_model.keras')

test_loss=finalmodel.evaluate(x_test,y_test)
train_loss=finalmodel.evaluate(x_train,y_train)
prediction=finalmodel.predict(x_test)
prediction=scalary.inverse_transform(prediction)
r2=r2_score(scalery.inverse_transform(y_test),prediction)
r2

17/17 1s 26ms/step - loss: 0.0021
79/79 2s 26ms/step - loss: 0.0026
17/17 1s 37ms/step
0.9161285228317665
```



PROJECTS

MULTIPLE MACHINE LEARNING PROJECTS

Skills and deliverables

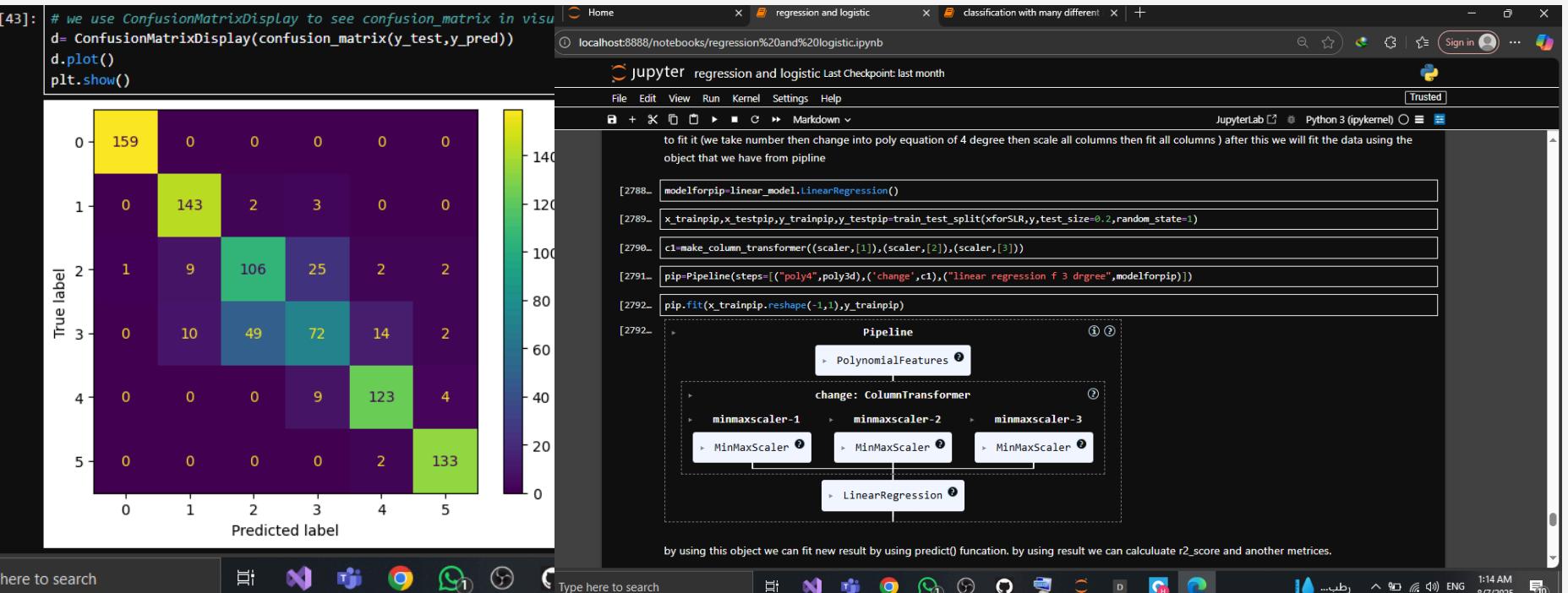
Machine Learning
Deep Learning
Python
Linear Regression
Classification

Project description

Applied regression, logistic regression, KNN, SVM, and neural networks to real-world datasets. Used Random Forest and SMOTE to improve model accuracy and handle class imbalance. Focused on solving overfitting/underfitting and tuning models for better generalization. Covered full ML pipeline: data preprocessing, modeling, evaluation, and deployment demos.

My role

Apply a lot of models with different data.



here to search

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```
[2730]: x_trainMLR,x_testMLR,y_trainMLR,y_testMLR=train_test_split(xMLR,yMLR)
modelMLR=linear_model.LinearRegression()
starttime=time.time()
modelMLR.fit(x_trainMLR,y_trainMLR)
endtime=time.time()
totaltimeMLR=endtime-starttime
modelMLR.coef_
```

```
[2730..]: array([0.99782569, 1.00087857, 0.99843562, 0.99709334])
```

```
[2731..]: # we change input data into dataframe because we give the data
# we can undo this ,but this make the code better
predict=modelMLR.predict(pd.DataFrame([[20,50,60,100]]),columns=['predict'])
[2731..]: array([229.945147])
```

```
[2732..]: prMLR=modelMLR.predict(x_testMLR)
mean_absolute_error(y_testMLR,prMLR)
```

```
[2732..]: 0.2837855572821304
```

```
[2733..]: mean_squared_error(y_testMLR,prMLR)
```

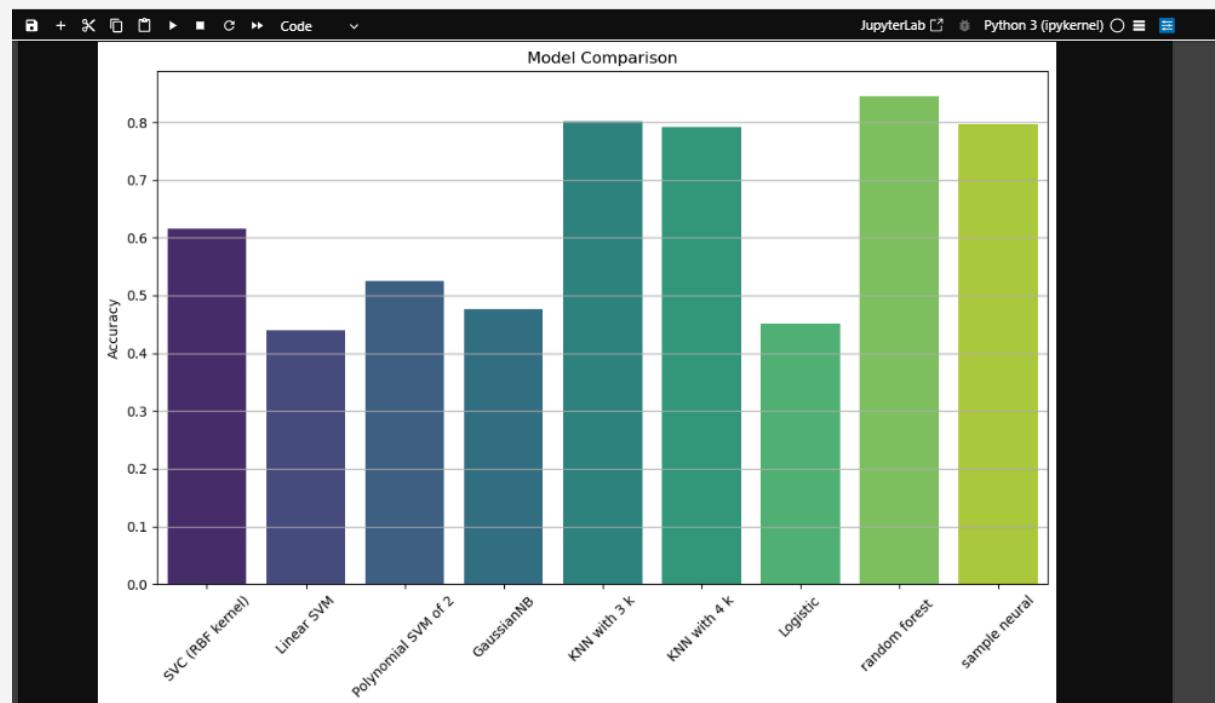
```
[2733..]: 5.368649386349388
```

```
[2738..]: r2=r2_score(y_testMLR,prMLR)
r2
```

```
[2738..]: 0.9968294813023709
```

o search

MULTIPLE MACHINE LEARNING PROJECTS



PROJECTS

CRIME DATA ANALYSIS - SAN FRANCISCO

Skills and deliverables

Big Data
Cluster
Analysis
Algorithms

Project description

Analyzed over 1M crime records using Logistic Regression, Random Forest, and clustering (K-Medoids, Hierarchical) to uncover crime patterns. Performed data cleaning, EDA, feature selection, and clustering optimization using Genetic Algorithm; identified 3 crime hotspots. Provided actionable recommendations to enhance public safety based on model insights and spatial analysis.

My role

Performed clustering optimization using Genetic Algorithm..

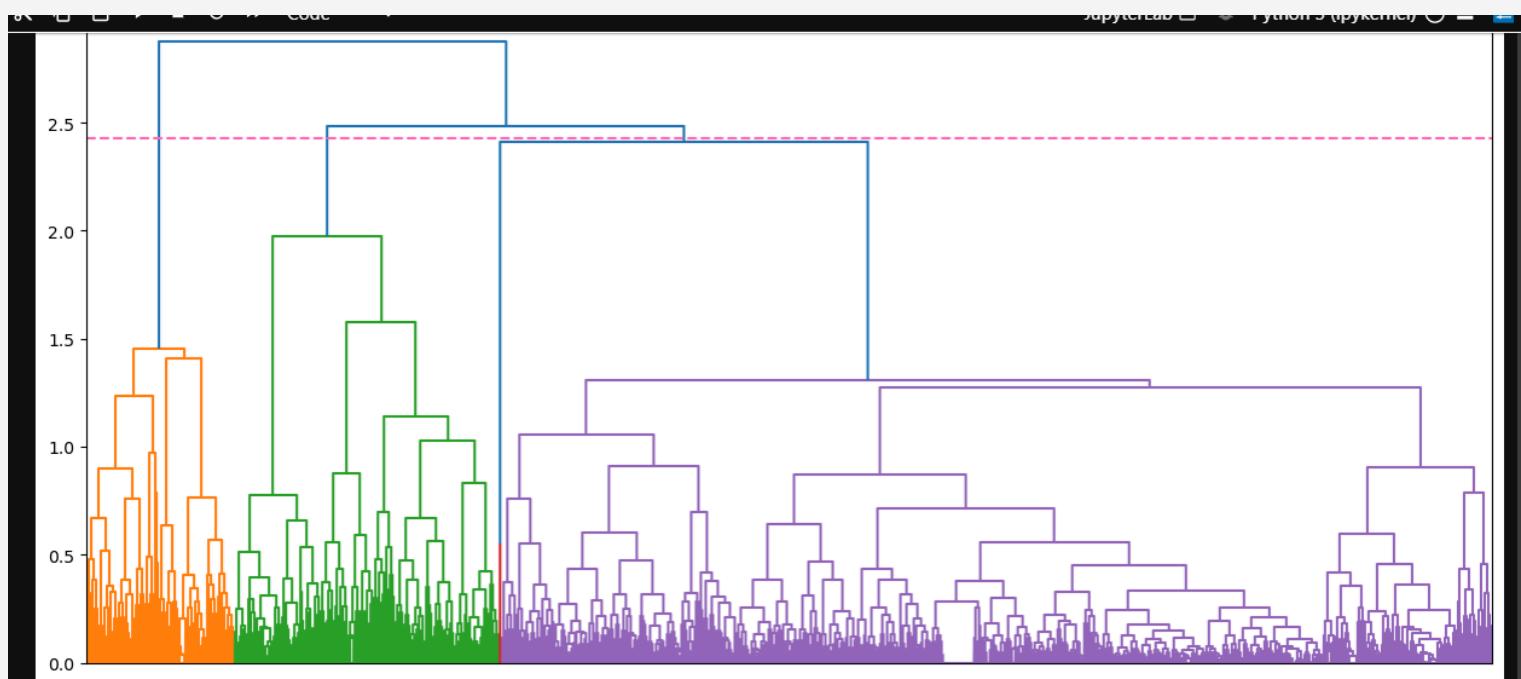
Hierarchical Cluster Algorithm is supported by the Genetic Algorithm.

```
[35]: # Import my Libraries
from sklearn.cluster import AgglomerativeClustering # to make hierarchical cluster
from sklearn.metrics import silhouette_score # to evaluate this cluster
from sklearn.preprocessing import StandardScaler # to normalize the data
import random # to choose random values
from scipy.cluster.hierarchy import dendrogram, linkage, fcluster # to make cluster , draw, know labels
import matplotlib.pyplot as plt # to draw
```

```
[37]: # I will choose the numerical features that i will use to cluster the data based on them (but we don't know those catogeries(unsupervised learning))
# we will normalize two columns by using standarscaler
data=df_clean[['X','Y']]
scalarx=StandardScaler()
scalary=StandardScaler()
x=np.array(data['X'])# I change them into array to can easily work with them (series are difficult)
y=np.array(data['Y'])
```

```
[39]: x=scalarx.fit_transform(x.reshape(-1,1)).flatten()# I use reshape to make it 2D
y=scalary.fit_transform(y.reshape(-1,1)).flatten()# flatten() to return it to 1D
```

CRIME DATA ANALYSIS - SAN FRANCISCO





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TO
COLLABORATE

