**Lung Cancer Recognition Using CT-Scan with NCA-XG Boosting & KNN**  
GitHub Link: <https://github.com/AishaFar/Lung-Cancer-Recognition-Using-CT-Scan-with-NCA-XG-Boosting-KNN>

Code Results Screenshots:  
  
  
 **1. Importing all the required libraries**  
Graphical user interface, text, application, email

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Here, Import Itertools , pickle, random, Matplotlib, math, copy, cv2, pandas as pd, matplotlib.pyplot as plt, numpy as np, imutils import paths, NeighnorhoodCompnentAnalysis,KNeighborsClassifier,AdaBoostClassifier, make\_pipeline, StandardScaler, XGBClassifier, Confui=sion\_matrix, Classification\_Report, accuracy\_score, plot\_precision\_recall\_curve, plot\_confusion\_matrix, train\_test\_split, Counter

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**2.Reading dataset path and loading images**  
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**3.Displaying array sample**

A picture containing text

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**4. Displaying Training Image**  
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**5. Splitting dataset into train-test**  
Graphical user interface, application

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**6. NCA-XGBoosting**  
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Text

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Text

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Table

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this is the result of the confusion matrix which provides an accuracy of 74.59%  
Chart

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Text

Description automatically generated with low confidence  
  
  
this is the result of the confusion matrix which provides an accuracy of 91.71%  
Chart

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The KNN Algorithm performances best among all the 3 algorithm with highest accuracy.

A picture containing table

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this is the result of the confusion matrix which provides an accuracy of 86.27%  
  
Chart

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