MEDAI

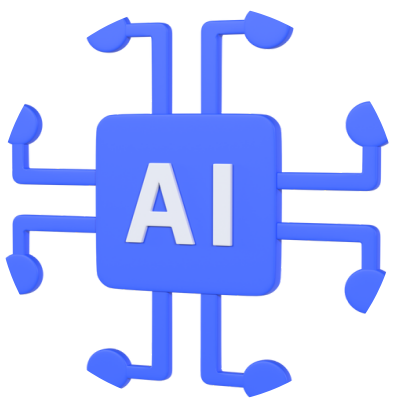
CANCER DETECTION APP

AI model for medical diagnosis

INTRODUCTION

Welcome to our AI Cancer Detection App! This guide will help you use our application to detect lung cancer types.

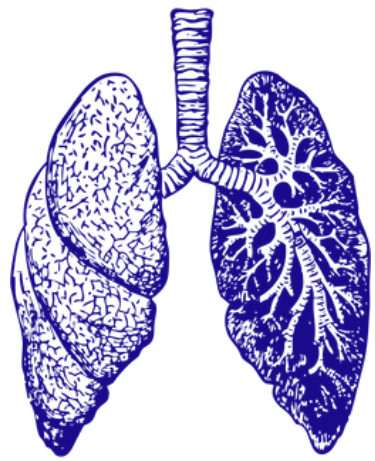
Our AI model has been trained on a diverse dataset, and it can predict the presence of Adenocarcinoma, Small Cell Carcinoma, Large Cell Carcinoma, or Squamous Cell Carcinoma based on the input images.



PROJECT OVERVIEW

Our project utilizes artificial intelligence to assist in the early detection of lung cancer. The dataset used for training includes CT and PET-CT DICOM images from patients with suspected lung cancer, along with XML Annotation files that indicate tumor locations with bounding boxes [1]. The patients were grouped based on their histopathological diagnosis: 'A' for Adenocarcinoma, 'B' for Small Cell Carcinoma, 'E' for Large Cell Carcinoma, and 'G' for Squamous Cell Carcinoma.

[1]https://wiki.cancerimagingarchive.net/pages/viewpage.action?pageId=70224216



USING AI CANCER DETECTION APP

Follow these simple steps to use our AI Cancer Detection App

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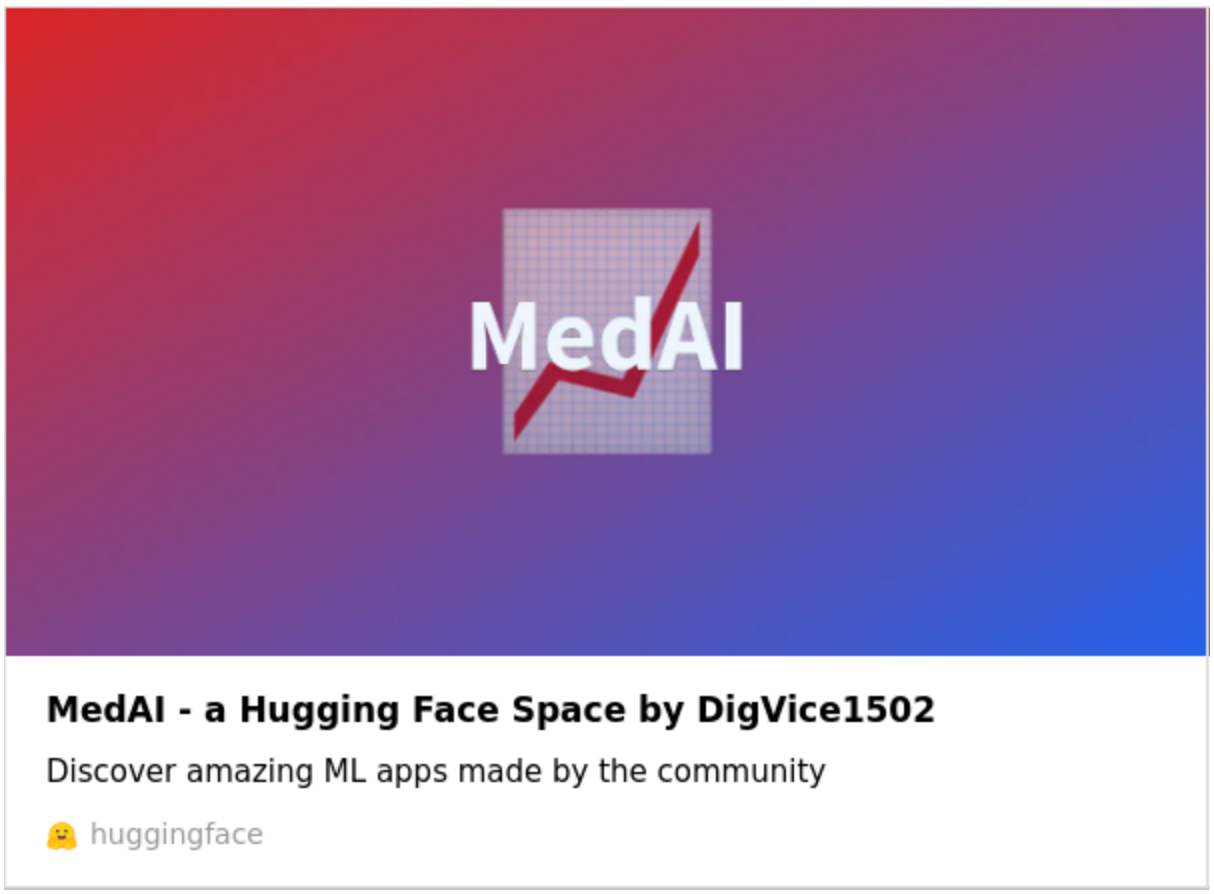
STEP 1: LAUNCHING APP

Double-click on the link:

https://huggingface.co/spaces/DigVice1502/MedAI



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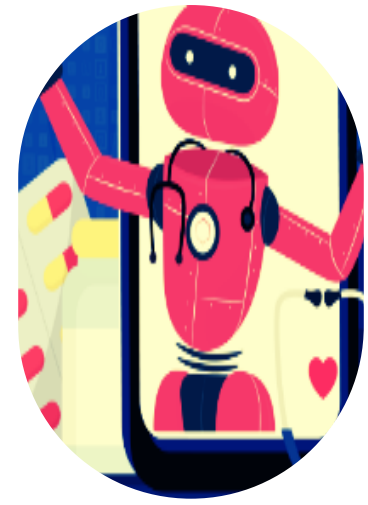
SELECTING AN IMAGE

Click on the "Browse File" button, and a file selection dialog box will appear

SELECTING AN IMAGE



Select the image file and click "Open."

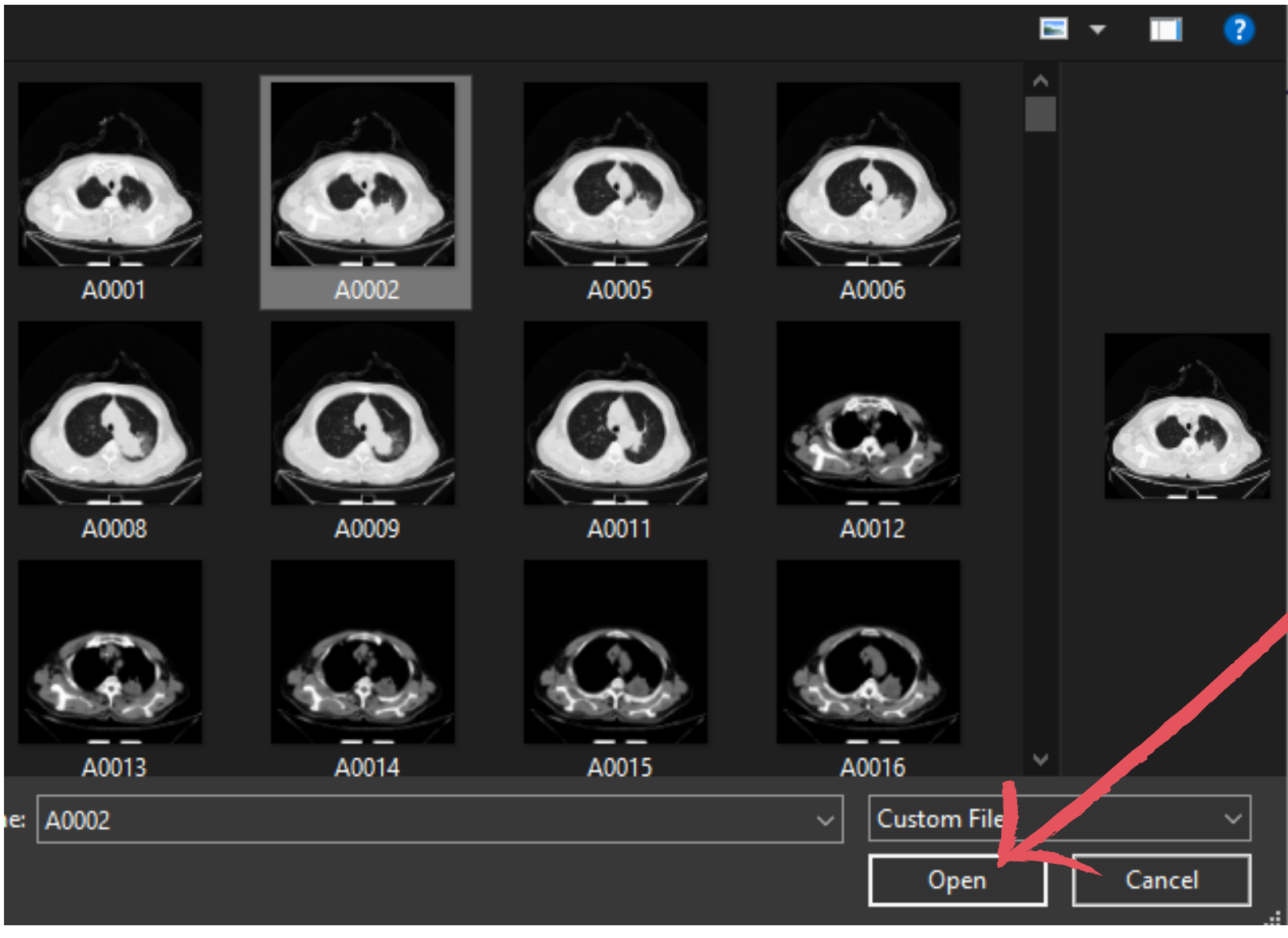


IMAGE PREDICTION

- The application will process the DICOM image and display it on the screen.
- Our AI model will analyze the image and predict the type of lung cancer present (Adenocarcinoma, Small Cell Carcinoma, Large Cell Carcinoma, or Squamous Cell Carcinoma).
- The prediction result will be displayed prominently on the screen.

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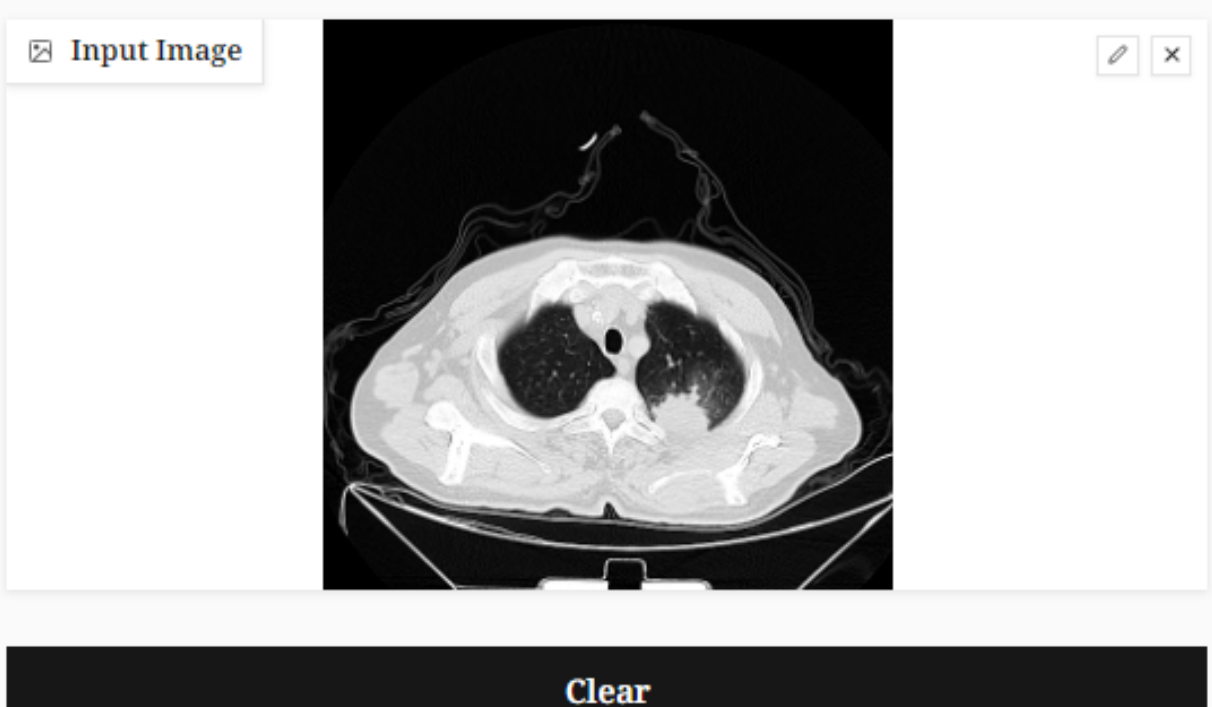
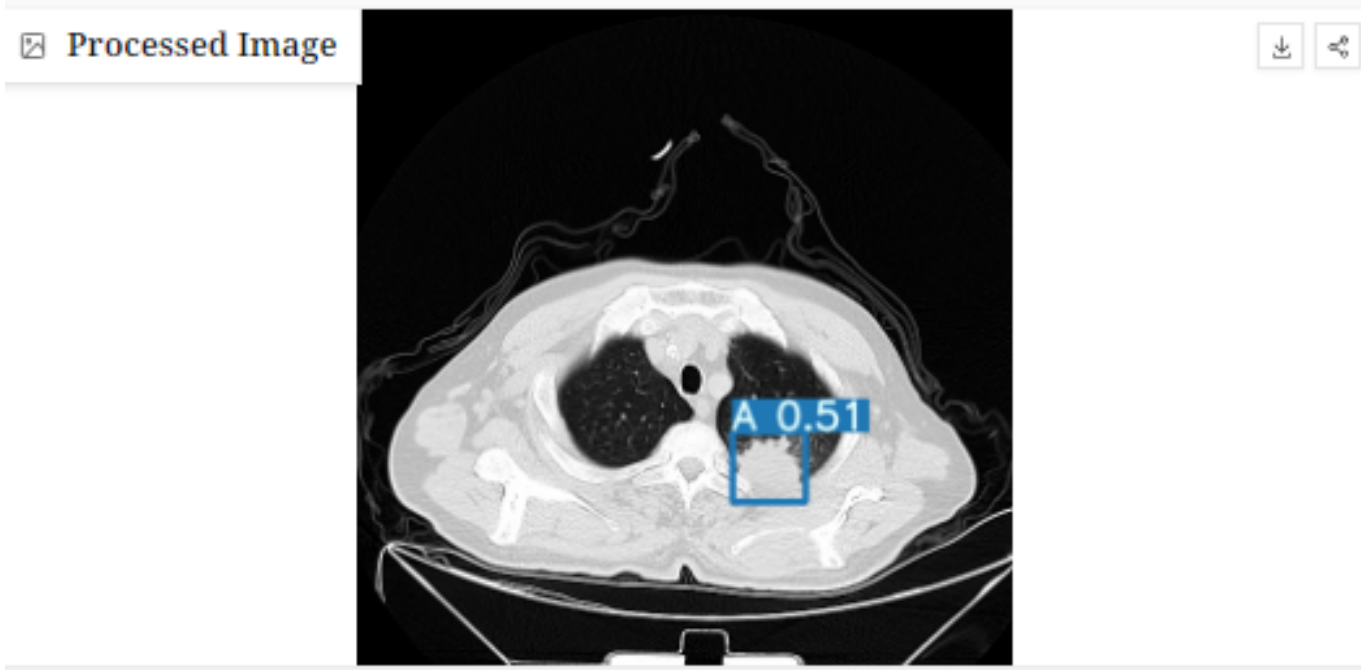
RESULTS





Detected Cancer Type

Adenocarcinoma