Ahmedabad
University

CSE541 Computer Vision

Weekly Project Report

Date: 26-02-2023

Project title: Real-time medical image disease detection using deep learning methods.

Group 8

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1. **Task performed this week**
   - We did more research on the dataset and gastrointestinal diseases and finalized the number of classes.
   - We decided the tentative approach to our project, which we will follow.

2. **Outcomes of task performed**
   - We decided to keep three classes each of anatomical landmarks and pathological findings.
   - The classes are as follows:
     - Anatomical landmarks:
       1. Z-line
       2. Pylorus
       3. Cecum
     - Pathological findings:
       1. Esophagitis
       2. Polyps
       3. Ulcerative-colitis
   - Tentative approach for our project:
     1. Image Resizing
     2. Image Pre-processing
     3. Image Augmentation
     4. Split the dataset into train and test sets
     5. Fine tuning and initial implementation of the pre-trained model
     6. Improving the model
     7. Final implementation and analysis of the outputs

3. **Tasks to be performed in the upcoming week**
   - We will perform image resizing and image pre-processing.
   - We will research more about the ResNet architecture and transfer learning.