**Database Creation**

**Name:** Thermal Database

**Folders:** Malignant, NonMalignant, Normal, Normal\_AgeAdjust

**Folder Description:**

Malignant:

* Number of sub folders = 93
* Naming Convention: P0001, P0002…

Nonmalignant :

* Number of sub folders =79
* Naming Convention: P0003, P0004….

Normal:

* Number of sub folders = 93
* Naming Convention: T001, T002…..

Normal\_AgeAdjust:

* Number of sub folders = 43
* Naming Conventions: T001, T003…

**Ground Truth Creation:**

**Path:** FinalDB\ Create\_Ground\_Truth\_ROI

**Contents:**

1. Three excel files containing manually annotated facial landmarks for front face.

**Name:**

Thermal\_normal\_keypts\_FRONTface.xls

Thermal\_NonMalignant\_keypts\_FRONTface.xls

Thermal\_Malignant\_keypts\_FRONTface.xls

1. Three excel files containing manually annotated facial landmarks for profile face.

**Name:**

Thermal\_normal\_keypts\_LRface.xls

Thermal\_NonMalignant\_keypts\_LRface.xls

Thermal\_Malignant\_keypts\_LRface.xls

1. Three matlab script for manually creating ground truth facial ROI for frontal face.

**Name:**

createFront\_ROI\_Normal.m

createFront\_ROI\_NonMalignant.m

createFront\_ROI\_Malignant.m

1. Three matlab script for creating ground truth facial ROI for profile face.

**Name:**

createProfile\_ROI\_Normal.m

createProfile\_ROI\_NonMalignant.m

createProfile\_ROI\_Malignant.m

**Clinical Data:**

**Path:** FinalDB\Clinical DATA

**Contents:**

The following excel file contains clinical data for normal, precancerous and malignant subjects:

1. Normal\_Record\_v1.0 .xls
2. Precancerous\_Record\_v1.0.xls
3. Malignant\_Record\_v1.0.xls

**Folder Contents:**

1. **Malignant:** Contains data for Malignant subjects

**Folders: P0001, P0002…..** (Each folder refers to a different patient)

**Folder Contents:** Each folder will have the following contents

1. **Three CSV Files:** These contain the thermal image of 1 frontal setting and 2 profile setting

**Path:** FinalDB\ThermalDatabase\Malignant

**Naming Convention:** excel name starts with folder name

Eg: P0001.csv 🡪 Frontal IR Image

P0001\_lt.csv 🡪 Left IR Image

P0001\_rt.csv 🡪 Right IR Image

1. **Ground Truth Frontal Facial ROI:** This folder contains the mat file which stores the left and right half of front face.

**Eg Path:** FinalDB\ThermalDatabase\Malignant\P0001

**Folder Naming Convention:**  name ends with folder name

**Eg*:***Front\_ROI\_P0001*: Inside this folder a mat file is stored with the name ‘Face\_Mask.mat’. Loading ‘Face\_Mask.mat’ loads (img\_face\_lt, img\_face\_rt) which is the (left,righ)t half ROI of frontal face.*

1. **Ground Truth Profile Facial ROI:** This folder contains the mat file which stores the left and right half of profile face.

**Eg Path:** FinalDB\ThermalDatabase\Malignant\P0001

**Folder Naming Convention:**  name ends with folder name

**Eg*:***Profile\_ROI\_P0001*: Inside this folder a mat file is stored with the name ‘Face\_Mask.mat’. Loading ‘Face\_Mask.mat’ loads (img\_face\_lt, img\_face\_rt) which is the left and right ROI of (left,right) profile face.*

1. **Ground Truth Face Border For Frontal Face:** This is a mat file which contains the manually created top, bottom, left and right borders of frontal face.

**Path:** FinalDB\ThermalDatabase\Malignant

**Naming Convention:** mat file name ends with folder name

Eg: Ground\_Truth\_F\_Borders\_P0001.mat

1. **NonMalignant:** Everything is exactly similar to point no 1 i,e Malignant subjects
2. **Normal:** Everything is exactly similar to point no 1 i,e Malignant subjects
3. **Normal\_AgeAdjust:** Everything is exactly similar to point no 1 i,e Malignant subjects