LAMPIRAN A

PARAMETER PENGOLAHAN CITRA

PADA MATLAB

1. Gaussian Filter : parameter ukuran matriks (h) dan standar deviasi (sigma)


Citra Awal


h=3x3 ; sigma=0,5


h=3x3 ; sigma=1,5


h=3x3 ; sigma=2,5


Citra Awal


h=5x5 ; sigma=0,5


h=5x5 ; sigma=1,5


h=5x5 ; sigma=2,5


Citra Awal


h=7x7 ; sigma=0,5

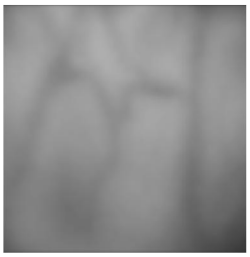

h=7x7 ; sigma=1,5


h=7x7 ; sigma=2,5

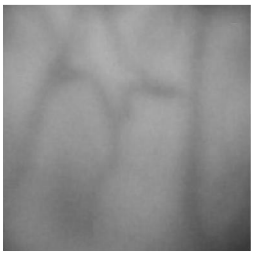

Citra Awal


h=9x9 ; sigma=0,5


h=9x9 ; sigma=1,5


h=9x9 ; sigma=2,5


Citra Awal

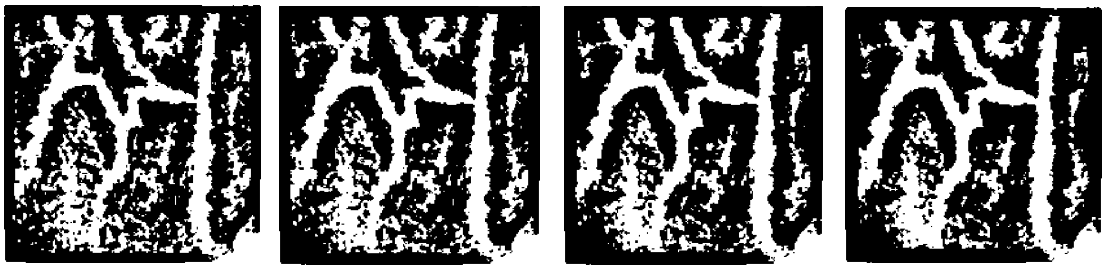

h=11x11;sigma=0,5


h=11x11;sigma=1,5


h=11x11;sigma=2,5

2. Local Threshold : parameter ukuran jendela (n)

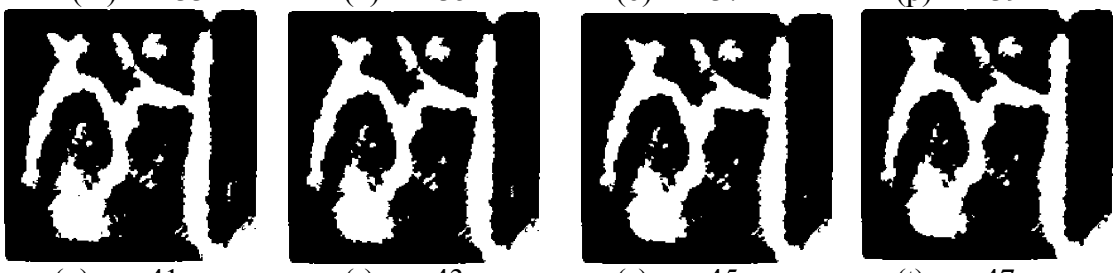
(a) n = 9 (b) n = 11 (c) n = 13 (d) n = 15



(e) n = 17 (f) n = 19 (g) n = 21 (h) n = 23

(i) n = 25 (j) n = 27 (k) n = 29 (l) n = 31

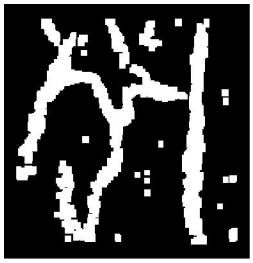
(m) n = 33 (n) n = 35 (o) n = 37 (p) n = 39



(q) n = 41 (r) n = 43 (s) n = 45 (t) n = 47

3. Opening & Closing : parameter structuring element

opening radius 1px

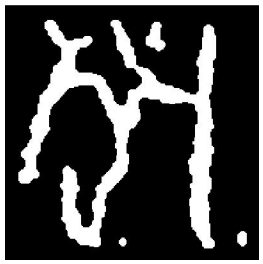


opening radius 3px

opening radius 5px

closing radius 1px

closing radius 3px



closing radius 5px

LAMPIRAN B

LIST PROGRAM PADA MATLAB

1. Program Pembentukan Database Citra Referensi

```
clear;
close all;
clc;

nClassTotal=10;
nMemberClassTotal=5;
Ekt='.jpg';
sample='-IMG-';
GdirAsal='C:\Users\user\Desktop\TA\Citra\Citra\Database\';
ListFile=[];
for KelasKe=1:nClassTotal
    for GambarKe=1:nMemberClassTotal
        if KelasKe<10
            if GambarKe<10
                NamaFile=['0' num2str(KelasKe) sample '0' num2str(GambarKe)];
            else
                NamaFile=['0' num2str(KelasKe) sample num2str(GambarKe)];
            end
        else
            if GambarKe<10
                NamaFile=[num2str(KelasKe) sample '0' num2str(GambarKe)];
            else
                NamaFile=[num2str(KelasKe) sample num2str(GambarKe)];
            end
        end
        NamaFile=[GdirAsal NamaFile Ekt];
        vein=imread(NamaFile);
        vein=imresize(vein,[200 200])
        CitraLatih=rgb2gray(vein);
        CitraLatih=im2double(CitraLatih);

        %gaussian 2D filter
        h_Latih=fspecial('gaussian',[3 3],0.5);
        GF_Latih=imfilter(CitraLatih,h_Latih);

        %median filter
        MF_Latih=medfilt2(GF_Latih);

        %contrast stretching
        CS_Latih=imadjust(MF_Latih,stretchlim(MF_Latih),[]);

        %Local Thresholding
        n_Latih=27;
        BW1=(CS_Latih>conv2(CS_Latih,1/(n_Latih^2)*ones(n_Latih),'same'));
        BW_Latih=(~BW1);

        %Opening
        SEO_Latih=strel('disk',5);
        openBW_Latih=imopen(BW_Latih,SEO_Latih);

        %Closing
        SEC_Latih=strel('disk',5);
        closeBW_Latih=imclose(openBW_Latih,SEC_Latih);

        %Thinning
        Thinning_Latih=bwmorph(closeBW_Latih,'thin',Inf);

        %Modified Hausdorff Distance
        im_sz1 = size(Thinning_Latih);
        im_sz2 = size(Thinning_Uji);
```

```
        %Check if the inputs have the same size
        if(sum(abs(im_sz1-im_sz2))~=0)
             error('im1 and im2 must with the same size');
        end

        dist_im1 = bwdist(Thinning_Latih,'euclidean');
        dist_im2 = bwdist(Thinning_Uji,'euclidean');
        pidx_im1 = find(Thinning_Latih);
        pidx_im2 = find(Thinning_Uji);

        d12 = mean(dist_im1(pidx_im2));
        d21 = mean(dist_im2(pidx_im1));

        d = max(d12,d21);

        ListFile=[ListFile ; d];

    end;
end;
```

2. Program Pengujian

```
close all;
clear all;
clc;

masuk=input('Nama File Uji:','s');
masuk=[masuk,'.jpg'];
CitraUji=imread(masuk);
CitraUji=imresize(CitraUji,[200 200]);
figure;imshow(CitraUji);title('Citra yang diuji');
CitraUji=rgb2gray(CitraUji);
CitraUji=im2double(CitraUji);

%gaussian 2D filter
h_Uji=fspecial('gaussian',[3 3],0.5);
GF_Uji=imfilter(CitraUji,h_Uji);

%median filter
MF_Uji=medfilt2(GF_Uji);

%contrast stretching
CS_Uji=imadjust(MF_Uji,stretchlim(MF_Uji),[]);

%Local Thresholding
n_Uji=27;
BW2=(CS_Uji>conv2(CS_Uji,1/(n_Uji^2)*ones(n_Uji),'same'));
BW_Uji=(~BW2);

%Opening
SEO_Uji=strel('disk',5);
openBW_Uji=imopen(BW_Uji,SEO_Uji);

%Closing
SEC_Uji=strel('disk',5);
closeBW_Uji=imclose(openBW_Uji,SEC_Uji);

%Thinning
Thinning_Uji=bwmorph(closeBW_Uji,'thin',Inf);
```

```
dk=min(ListFile);
if dk>8.9
    acc=imread('C:\Users\user\Desktop\TA\Citra\Citra\Untitled.jpg')
    figure;imshow(acc)
else
    [baris,kolom]=find(ListFile==dk);
    if
(baris==5)||(baris==10)||(baris==15)||(baris==20)||(baris==25)||(baris==30)||(baris==3
5)||(baris==40)||(baris==45)||(baris==50)
        kelas=floor((baris/5));
        gambar=mod(baris,5)+5;
    else
        kelas=floor((baris/5))+1;
        gambar=mod(baris,5);
    end
    if kelas<10
            if gambar<10
                NamaFile=['0' num2str(kelas) sample '0' num2str(gambar)];
            else
                NamaFile=['0' num2str(kelas) sample num2str(gambar)];
            end
    else
            if gambar<10
                NamaFile=[num2str(kelas) sample '0' num2str(gambar)];
            else
                NamaFile=[num2str(kelas) sample num2str(gambar)];
            end
    end

    NamaFile=[GdirAsal NamaFile Ekt];
    figure;imshow(NamaFile);title('Citra yang mirip');
end
```

3. Program GUI untuk Pengujian

```
function varargout = IDENTIFIKASI_CITRA_PEMBULUH_DARAH(varargin)
% IDENTIFIKASI_CITRA_PEMBULUH_DARAH MATLAB code for
IDENTIFIKASI_CITRA_PEMBULUH_DARAH.fig
%      IDENTIFIKASI_CITRA_PEMBULUH_DARAH, by itself, creates a new
IDENTIFIKASI_CITRA_PEMBULUH_DARAH or raises the existing
%      singleton*.
%
%      H = IDENTIFIKASI_CITRA_PEMBULUH_DARAH returns the handle to a new
IDENTIFIKASI_CITRA_PEMBULUH_DARAH or the handle to
%      the existing singleton*.
%
%      IDENTIFIKASI_CITRA_PEMBULUH_DARAH('CALLBACK',hObject,eventData,handles,...)
calls the local
%      function named CALLBACK in IDENTIFIKASI_CITRA_PEMBULUH_DARAH.M with the given
input arguments.
%
%      IDENTIFIKASI_CITRA_PEMBULUH_DARAH('Property','Value',...) creates a new
IDENTIFIKASI_CITRA_PEMBULUH_DARAH or raises the
%      existing singleton*.  Starting from the left, property value pairs are
%      applied to the GUI before IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OpeningFcn gets
called.  An
%      unrecognized property name or invalid value makes property application
%      stop.  All inputs are passed to IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OpeningFcn
via varargin.
%
%      *See GUI Options on GUIDE's Tools menu.  Choose "GUI allows only one
%      instance to run (singleton)".
%
```

```
% See also: GUIDE, GUIDATA, GUIHANDLES
% Edit the above text to modify the response to help IDENTIFIKASI_CITRA_PEMBULUH_DARAH
% Last Modified by GUIDE v2.5 01-Aug-2013 12:34:03
% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name',       mfilename, ...
                   'gui_Singleton',  gui_Singleton, ...
                   'gui_OpeningFcn', @IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OpeningFcn,...
                   'gui_OutputFcn',  @IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OutputFcn, ...
                   'gui_LayoutFcn',  [] , ...
                   'gui_Callback',   []);
if nargin && ischar(varargin{1})
    gui_State.gui_Callback = str2func(varargin{1});
end
if nargout
    [varargout{1:nargout}] = gui_mainfcn(gui_State, varargin{:});
else
    gui_mainfcn(gui_State, varargin{:});
end
% End initialization code - DO NOT EDIT
% --- Executes just before IDENTIFIKASI_CITRA_PEMBULUH_DARAH is made visible.
function IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OpeningFcn(hObject, eventdata, handles,
varargin)
% This function has no output args, see OutputFcn.
% hObject    handle to figure
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% varargin   command line arguments to IDENTIFIKASI_CITRA_PEMBULUH_DARAH (see
VARARGIN)
% Choose default command line output for IDENTIFIKASI_CITRA_PEMBULUH_DARAH
handles.output = hObject;
% Update handles structure
guidata(hObject, handles);

% UIWAIT makes IDENTIFIKASI_CITRA_PEMBULUH_DARAH wait for user response (see UIRESUME)
% uiwait(handles.figure1);
% --- Outputs from this function are returned to the command line.

function varargout = IDENTIFIKASI_CITRA_PEMBULUH_DARAH_OutputFcn(hObject, eventdata,
handles)
% varargout  cell array for returning output args (see VARARGOUT);
% hObject    handle to figure
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% Get default command line output from handles structure
varargout{1} = handles.output;

% --- Executes on button press in pushbutton1.
function pushbutton1_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)

[x y]=uigetfile('*.jpg');
imagex=imread(fullfile(y,x));
imagex=imresize(imagex,[200 200])
imagex=rgb2gray(imagex)
imagex=im2double(imagex)
axes(handles.axes1)
imshow(imagex)
set(handles.edit1,'string',x)
handles.img=imagex;
guidata(hObject,handles)
```

```
% --- Executes on button press in pushbutton2.
function pushbutton2_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton2 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
CitraUji=handles.img;

%gaussian 2D filter
h_Uji=fspecial('gaussian',[3 3],0.5);
GF_Uji=imfilter(CitraUji,h_Uji);

%median filter
MF_Uji=medfilt2(GF_Uji);

%contrast stretching
CS_Uji=imadjust(MF_Uji,stretchlim(MF_Uji),[]);

%Local Thresholding
n_Uji=27;
BW2=(CS_Uji>conv2(CS_Uji,1/(n_Uji^2)*ones(n_Uji),'same'));
BW_Uji=(~BW2);

%Opening
SEO_Uji=strel('disk',5);
openBW_Uji=imopen(BW_Uji,SEO_Uji);

%Closing
SEC_Uji=strel('disk',5);
closeBW_Uji=imclose(openBW_Uji,SEC_Uji);

%Thinning
Thinning_Uji=bwmorph(closeBW_Uji,'thin',Inf);

nClassTotal=10;
nMemberClassTotal=5;
Ekt='.jpg';
sample='-IMG-';
GdirAsal='C:\Users\user\Desktop\Citra\Database\';

ListFile=[];
for KelasKe=1:nClassTotal
    for GambarKe=1:nMemberClassTotal
        if KelasKe<10
            if GambarKe<10
                NamaFile=['0' num2str(KelasKe) sample '0' num2str(GambarKe)];
            else
                NamaFile=['0' num2str(KelasKe) sample num2str(GambarKe)];
            end
        else
            if GambarKe<10
                NamaFile=[num2str(KelasKe) sample '0' num2str(GambarKe)];
            else
                NamaFile=[num2str(KelasKe) sample num2str(GambarKe)];
            end
        end
        NamaFile=[GdirAsal NamaFile Ekt];
        vein=imread(NamaFile);
         vein=imresize(vein,[200 200])
        CitraLatih=rgb2gray(vein);
        CitraLatih=im2double(CitraLatih);

        %gaussian 2D filter
        h_Latih=fspecial('gaussian',[3 3],0.5);
        GF_Latih=imfilter(CitraLatih,h_Latih);
```

```
        %median filter
        MF_Latih=medfilt2(GF_Latih);

        %contrast stretching
        CS_Latih=imadjust(MF_Latih,stretchlim(MF_Latih),[]);

        %Local Thresholding
        n_Latih=27;
              BW1=(CS_Latih>conv2(CS_Latih,1/(n_Latih^2)*ones(n_Latih),'same'));
        BW_Latih=(~BW1);

        %Opening
        SEO_Latih=strel('disk',5);
        openBW_Latih=imopen(BW_Latih,SEO_Latih);

        %Closing
        SEC_Latih=strel('disk',5);
        closeBW_Latih=imclose(openBW_Latih,SEC_Latih);

        %Thinning
        Thinning_Latih=bwmorph(closeBW_Latih,'thin',Inf);

        %Modified Hausdorff Distance
        im_sz1 = size(Thinning_Latih);
        im_sz2 = size(Thinning_Uji);

        %Check if the inputs have the same size
        if(sum(abs(im_sz1-im_sz2))~=0)
             error('im1 and im2 must with the same size');
        end

        dist_im1 = bwdist(Thinning_Latih,'euclidean');
        dist_im2 = bwdist(Thinning_Uji,'euclidean');
        pidx_im1 = find(Thinning_Latih);
        pidx_im2 = find(Thinning_Uji);

        d12 = mean(dist_im1(pidx_im2));
        d21 = mean(dist_im2(pidx_im1));

        d = max(d12,d21);
         ListFile=[ListFile ; d];
    end;
end;

dk=min(ListFile);
if dk>8.9
    acc=imread('C:\Users\user\Desktop\Citra\Untitled.jpg')
    axes(handles.axes2)
    imshow(acc)
    set(handles.edit3,'string',dk)
    set(handles.edit4,'string','Tidak Teridentifikasi')

else
    [baris,kolom]=find(ListFile==dk);
    if
(baris==5)||(baris==10)||(baris==15)||(baris==20)||(baris==25)||(baris==30)||(baris==3
5)||(baris==40)||(baris==45)||(baris==50)
        kelas=floor((baris/5));
        gambar=mod(baris,5)+5;
    else
        kelas=floor((baris/5))+1;
        gambar=mod(baris,5);
    end
```

```
if kelas<10
            if gambar<10
                NamaFile=['0' num2str(kelas) sample '0' num2str(gambar)];
            else
                NamaFile=['0' num2str(kelas) sample num2str(gambar)];
            end
    else
            if gambar<10
                NamaFile=[num2str(kelas) sample '0' num2str(gambar)];
            else
                NamaFile=[num2str(kelas) sample num2str(gambar)];
            end
    end
    NamaFiles=[GdirAsal NamaFile Ekt];
    Identifikasi=imread(NamaFiles)
    axes(handles.axes2)
    imshow(Identifikasi)
    guidata(hObject,handles);
    set(handles.edit2,'string',[NamaFile Ekt])
    set(handles.edit3,'string',dk)
    set(handles.edit4,'string','Teridentifikasi')
end

% --- Executes on button press in pushbutton3.
function pushbutton3_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton3 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
fig = handles.figure1;
close(fig)

function edit1_Callback(hObject, eventdata, handles)
% hObject    handle to edit1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
 % Hints: get(hObject,'String') returns contents of edit1 as text
%        str2double(get(hObject,'String')) returns contents of edit1 as a double
 % --- Executes during object creation, after setting all properties.

function edit1_CreateFcn(hObject, eventdata, handles)
% hObject    handle to edit1 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called
% Hint: edit controls usually have a white background on Windows.
%       See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

function edit2_Callback(hObject, eventdata, handles)
% hObject    handle to edit2 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% Hints: get(hObject,'String') returns contents of edit2 as text
%        str2double(get(hObject,'String')) returns contents of edit2 as a double

% --- Executes during object creation, after setting all properties.
function edit2_CreateFcn(hObject, eventdata, handles)
% hObject    handle to edit2 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called
```

```
% Hint: edit controls usually have a white background on Windows.
%       See ISPC and COMPUTER.

if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

function edit3_Callback(hObject, eventdata, handles)
% hObject    handle to edit3 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% Hints: get(hObject,'String') returns contents of edit3 as text
%        str2double(get(hObject,'String')) returns contents of edit3 as a double
% --- Executes during object creation, after setting all properties.
function edit3_CreateFcn(hObject, eventdata, handles)
% hObject    handle to edit3 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called
% Hint: edit controls usually have a white background on Windows.
%       See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

function edit4_Callback(hObject, eventdata, handles)
% hObject    handle to edit4 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
% Hints: get(hObject,'String') returns contents of edit4 as text
%        str2double(get(hObject,'String')) returns contents of edit4 as a double
% --- Executes during object creation, after setting all properties.

function edit4_CreateFcn(hObject, eventdata, handles)
% hObject    handle to edit4 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    empty - handles not created until after all CreateFcns called
% Hint: edit controls usually have a white background on Windows.
%       See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

% --- Executes on button press in pushbutton4.
function pushbutton4_Callback(hObject, eventdata, handles)
% hObject    handle to pushbutton4 (see GCBO)
% eventdata  reserved - to be defined in a future version of MATLAB
% handles    structure with handles and user data (see GUIDATA)
set(handles.edit1,'String','');
set(handles.edit2,'String','');
set(handles.edit3,'String','');
set(handles.edit4,'String','');
axes(handles.axes1);cla('reset');
axes(handles.axes2);cla('reset');
guidata(hObject,handles);
```

LAMPIRAN C

NILAI BATAS

MODIFIED HAUSDORFF DISTANCE

1. Pengujian MHD Citra Latih Orang ke-1

	01-IMG-01	01-IMG-02	01-IMG-03	01-IMG-04	01-IMG-05
01-IMG-01	0	3.590678	5.048217	5.97213	4.061577
01-IMG-02	3.590678	0	4.934194	4.022603	1.851356
01-IMG-03	5.048217	4.934194	0	3.40803	6.280101
01-IMG-04	5.97213	4.022603	3.40803	0	5.846337
01-IMG-05	4.061577	1.851356	6.280101	5.846337	0
02-IMG-01	10.7428	9.036922	10.78687	10.7523	9.349507
02-IMG-02	11.79163	11.55426	11.53598	11.17914	11.66061
02-IMG-03	9.21724	10.23683	11.58709	11.92398	10.35552
02-IMG-04	11.12707	12.14994	10.82923	11.54694	12.4013
02-IMG-05	11.86691	11.69251	11.40575	10.97646	11.8945
03-IMG-01	13.28225	12.60641	11.38044	12.02858	12.57269
03-IMG-02	13.16972	13.28439	15.13752	15.02506	13.57659
03-IMG-03	12.34243	12.39464	13.38165	13.50927	11.9744
03-IMG-04	14.0509	15.5221	13.8918	14.61937	15.36099
03-IMG-05	14.53083	15.37892	17.20678	17.04811	15.10359
04-IMG-01	10.79326	9.217424	10.4322	10.0527	9.036263
04-IMG-02	16.1777	16.3802	15.39022	15.95449	15.8507
04-IMG-03	10.30174	10.99234	10.35919	10.81374	10.83241
04-IMG-04	11.49431	9.858562	11.60087	11.08885	9.671884
04-IMG-05	14.16669	13.85827	14.18275	14.35788	13.54254
05-IMG-01	17.26519	17.74543	15.67956	15.57994	17.81385
05-IMG-02	17.13315	16.77358	16.74539	15.67558	17.17155
05-IMG-03	21.76908	23.01898	19.55901	20.36297	23.51748
05-IMG-04	17.18846	18.47242	15.91709	15.11557	19.35148
05-IMG-05	15.6792	15.32767	15.22058	15.04077	15.34335
06-IMG-01	11.52362	12.59492	13.46731	14.49215	12.67228
06-IMG-02	13.78016	14.21693	14.09315	14.35269	14.54491
06-IMG-03	13.13916	14.21387	14.56879	15.80412	14.11219
06-IMG-04	13.27314	12.84339	15.27788	13.37404	12.86605
06-IMG-05	13.93403	14.06979	14.45191	14.87607	13.34092
07-IMG-01	13.21752	13.8278	14.46823	13.69931	14.38713
07-IMG-02	13.20424	14.03269	14.50825	13.73908	14.62039
07-IMG-03	10.24419	11.01349	11.98299	12.78967	10.98551
07-IMG-04	9.831134	10.40581	11.2556	11.9664	10.25959
07-IMG-05	11.29002	10.75182	12.03065	11.94774	11.01538
08-IMG-01	14.21051	12.54943	11.86108	11.6712	12.62506
08-IMG-02	12.36786	10.20389	12.70921	11.34383	10.41895
08-IMG-03	15.908	13.11087	13.03753	13.03322	13.29353
08-IMG-04	15.92873	12.86308	12.82147	12.60676	13.33937
08-IMG-05	14.43426	11.73562	13.31726	12.32093	11.74409
09-IMG-01	14.90731	14.93894	15.18254	14.95798	15.12179
09-IMG-02	17.63012	16.95212	17.32218	17.36768	16.9241
09-IMG-03	16.93677	15.11609	15.08883	14.97552	15.93143
09-IMG-04	15.54292	16.00141	16.42723	16.24907	15.95266
09-IMG-05	15.05702	16.00987	15.19314	16.12544	15.42142
10-IMG-01	18.50122	19.27571	16.32355	16.77104	19.24273
10-IMG-02	16.35028	16.45551	16.94348	16.41297	16.28536
10-IMG-03	18.91662	19.19702	20.00976	20.0568	18.21964
10-IMG-04	21.57783	21.3676	20.03181	19.74591	21.13751
10-IMG-05	14.32708	14.63598	14.98744	15.27219	13.7479

Nilai maksimum Orang ke-1 yang ‘mirip’ = 6,280101
Nilai minimum Orang ke-1 yang ‘tidak mirip’ = 9,036263

2. Pengujian MHD Citra Latih Orang ke-2

	02-IMG-01	02-IMG-02	02-IMG-03	02-IMG-04	02-IMG-05
02-IMG-01	0	8.934964	6.401631	10.20549	8.336092
02-IMG-02	8.934964	0	8.031549	8.564904	3.026074
02-IMG-03	6.401631	8.031549	0	7.595219	7.062163
02-IMG-04	10.20549	8.564904	7.595219	0	8.308051
02-IMG-05	8.336092	3.026074	7.062163	8.308051	0
01-IMG-01	10.7428	11.79163	9.21724	11.12707	11.86691
01-IMG-02	9.036922	11.55426	10.23683	12.14994	11.69251
01-IMG-03	10.78687	11.53598	11.58709	10.82923	11.40575
01-IMG-04	10.7523	11.17914	11.92398	11.54694	10.97646
01-IMG-05	9.349507	11.66061	10.35552	12.4013	11.8945
03-IMG-01	12.29905	11.96222	11.47024	10.0463	11.39055
03-IMG-02	14.16159	14.67165	14.18047	14.82904	14.98043
03-IMG-03	11.72792	9.556927	10.15871	9.667986	9.819183
03-IMG-04	13.92464	12.50257	11.57191	8.940738	11.95016
03-IMG-05	15.80056	14.21609	14.49412	14.0055	14.46757
04-IMG-01	10.23464	9.660576	11.02101	10.71704	9.413072
04-IMG-02	14.32686	13.75183	12.96171	14.75859	13.58287
04-IMG-03	11.14465	9.595809	11.02923	10.53271	9.703251
04-IMG-04	10.92975	10.28297	11.15383	12.06654	10.21936
04-IMG-05	14.70344	14.48939	12.99386	12.93163	14.77787
05-IMG-01	17.57993	15.01235	16.7287	14.44117	16.49938
05-IMG-02	18.57402	16.42602	17.26675	16.85079	16.43278
05-IMG-03	25.96415	22.87322	25.91525	22.39934	25.0867
05-IMG-04	21.4456	19.15238	19.63924	17.73469	19.15883
05-IMG-05	17.40636	17.03558	17.50571	18.30877	16.50024
06-IMG-01	14.00629	14.07606	14.73866	14.27966	14.70737
06-IMG-02	16.17111	14.21119	16.45244	14.89672	14.15213
06-IMG-03	12.8927	14.23906	13.59632	13.83932	13.51853
06-IMG-04	12.94236	12.66797	12.13497	13.62144	12.8206
06-IMG-05	15.8585	15.13623	16.08163	15.55801	15.13638
07-IMG-01	10.25717	9.899261	9.059833	9.319278	10.17899
07-IMG-02	10.16359	10.28277	9.721084	10.2862	10.5544
07-IMG-03	10.06522	10.20344	10.20795	12.13798	9.827537
07-IMG-04	10.07485	9.914275	10.18398	12.01104	10.17716
07-IMG-05	9.570222	8.714188	9.650689	11.38852	8.663402
08-IMG-01	14.55439	15.64611	15.64834	16.39986	15.44834
08-IMG-02	12.599	15.00761	14.67234	13.08325	15.76372
08-IMG-03	12.77144	14.09736	14.39288	15.50474	13.83347
08-IMG-04	14.41425	16.55292	14.58785	16.09327	15.89997
08-IMG-05	12.78381	15.55529	14.70284	15.54293	15.71932
09-IMG-01	13.69665	16.5488	14.93274	14.97489	15.47224
09-IMG-02	14.31251	13.47306	12.74872	11.31842	14.528
09-IMG-03	13.45345	13.31157	13.47631	11.90598	13.03672
09-IMG-04	14.38022	15.74157	13.89231	13.31305	15.03398
09-IMG-05	13.34375	10.45569	12.49566	10.70647	10.60017
10-IMG-01	22.29532	17.82719	21.69005	17.26659	19.14262
10-IMG-02	17.42462	16.57068	16.82841	18.7683	16.95195
10-IMG-03	17.88931	19.78879	18.79463	19.69052	20.4021
10-IMG-04	23.56394	19.80567	21.77838	19.73195	20.50629
10-IMG-05	14.55155	14.95835	14.30973	15.13341	13.95215

Nilai maksimum Orang ke-2 yang ‘mirip’ = 8,564904
Nilai minimum Orang ke-2 yang ‘tidak mirip’ = 8,663402

3. Pengujian MHD Citra Latih Orang ke-3

	03-IMG-01	03-IMG-02	03-IMG-03	03-IMG-04	03-IMG-05
03-IMG-01	0	12.9831	9.323462	8.070207	14.21275
03-IMG-02	12.9831	0	9.426132	11.09362	4.925839
03-IMG-03	9.323462	9.426132	0	7.207079	7.341539
03-IMG-04	8.070207	11.09362	7.207079	0	12.3576
03-IMG-05	14.21275	4.925839	7.341539	12.3576	0
01-IMG-01	13.28225	13.16972	12.34243	14.0509	14.53083
01-IMG-02	12.60641	13.28439	12.39464	15.5221	15.37892
01-IMG-03	11.38044	15.13752	13.38165	13.8918	17.20678
01-IMG-04	12.02858	15.02506	13.50927	14.61937	17.04811
01-IMG-05	12.57269	13.57659	11.9744	15.36099	15.10359
02-IMG-01	12.29905	14.16159	11.72792	13.92464	15.80056
02-IMG-02	11.96222	14.67165	9.556927	12.50257	14.21609
02-IMG-03	11.47024	14.18047	10.15871	11.57191	14.49412
02-IMG-04	10.0463	14.82904	9.667986	8.940738	14.0055
02-IMG-05	11.39055	14.98043	9.819183	11.95016	14.46757
04-IMG-01	10.88871	15.35891	10.46243	12.63312	14.28558
04-IMG-02	12.88008	19.06214	14.07917	13.2214	17.09101
04-IMG-03	11.49126	15.71311	10.55565	13.426	15.22797
04-IMG-04	11.57535	15.02983	11.77142	12.70795	14.3178
04-IMG-05	11.84811	15.23841	11.94876	13.01035	14.13204
05-IMG-01	14.42255	18.29537	15.20284	13.67037	17.94926
05-IMG-02	15.26043	15.9981	14.52127	14.57103	16.41162
05-IMG-03	19.66119	27.91339	19.51363	17.24865	26.89426
05-IMG-04	18.13124	19.95029	18.45217	16.60316	21.95865
05-IMG-05	15.27533	16.1711	14.54217	15.02924	16.77463
06-IMG-01	11.26178	13.75117	12.56525	11.89604	12.69613
06-IMG-02	11.20169	15.6417	13.80674	11.53694	14.59189
06-IMG-03	10.17626	12.71711	13.54614	11.93422	13.5063
06-IMG-04	13.94291	10.42798	10.73213	12.56385	10.06826
06-IMG-05	10.44838	13.52934	14.45985	14.08934	14.37698
07-IMG-01	13.53079	14.81695	12.31054	13.50247	15.55048
07-IMG-02	13.74065	14.75397	12.91763	14.54736	15.73552
07-IMG-03	15.00519	13.11262	11.68044	16.59879	12.88706
07-IMG-04	14.49437	13.49178	10.70713	15.62143	13.33079
07-IMG-05	13.8491	13.62891	11.07015	15.84184	13.58958
08-IMG-01	11.36174	13.45058	13.09719	13.3888	13.24579
08-IMG-02	17.22259	15.04156	14.88303	18.89723	12.82214
08-IMG-03	10.43018	12.31495	12.45658	13.33656	12.47689
08-IMG-04	12.75075	14.01397	13.93546	12.66288	13.9783
08-IMG-05	15.88723	15.28478	15.80135	18.1164	13.99883
09-IMG-01	13.81991	12.65932	13.8732	12.79606	13.17881
09-IMG-02	12.00824	12.35093	11.38276	12.74536	11.27039
09-IMG-03	12.69475	13.12837	11.37029	12.57421	12.40056
09-IMG-04	13.70955	12.24342	13.28942	14.0032	13.23412
09-IMG-05	10.65247	16.6548	11.99278	12.63851	15.41024
10-IMG-01	15.47722	25.12633	18.39118	16.12222	26.47486
10-IMG-02	20.85807	20.41149	20.89487	21.23946	22.87938
10-IMG-03	19.48078	17.95513	20.49773	17.12119	19.60489
10-IMG-04	19.27768	26.02402	21.73805	18.11638	27.69979
10-IMG-05	14.21483	17.96314	14.9114	17.60154	17.67076

Nilai maksimum Orang ke-3 yang ‘mirip’ = 8,070207
Nilai minimum Orang ke-3 yang ‘tidak mirip’ = 8,940738

4. Pengujian MHD Citra Latih Orang ke-4

	04-IMG-01	04-IMG-02	04-IMG-03	04-IMG-04	04-IMG-05
04-IMG-01	0	13.0668	3.923736	4.671416	12.92481
04-IMG-02	13.0668	0	12.80491	14.01425	6.021795
04-IMG-03	3.923736	12.80491	0	5.707769	12.28009
04-IMG-04	4.671416	14.01425	5.707769	0	13.07744
04-IMG-05	12.92481	6.021795	12.28009	13.07744	0
01-IMG-01	10.79326	16.1777	10.30174	11.49431	14.16669
01-IMG-02	9.217424	16.3802	10.99234	9.858562	13.85827
01-IMG-03	10.4322	15.39022	10.35919	11.60087	14.18275
01-IMG-04	10.0527	15.95449	10.81374	11.08885	14.35788
01-IMG-05	9.036263	15.8507	10.83241	9.671884	13.54254
02-IMG-01	10.23464	14.32686	11.14465	10.92975	14.70344
02-IMG-02	9.660576	13.75183	9.595809	10.28297	14.48939
02-IMG-03	11.02101	12.96171	11.02923	11.15383	12.99386
02-IMG-04	10.71704	14.75859	10.53271	12.06654	12.93163
02-IMG-05	9.413072	13.58287	9.703251	10.21936	14.77787
03-IMG-01	10.88871	12.88008	11.49126	11.57535	11.84811
03-IMG-02	15.35891	19.06214	15.71311	15.02983	15.23841
03-IMG-03	10.46243	14.07917	10.55565	11.77142	11.94876
03-IMG-04	12.63312	13.2214	13.426	12.70795	13.01035
03-IMG-05	14.28558	17.09101	15.22797	14.3178	14.13204
05-IMG-01	16.50071	15.48953	16.60361	15.91683	16.29828
05-IMG-02	14.39925	15.21218	14.75932	13.58039	14.21392
05-IMG-03	20.84433	21.07656	19.9394	18.35649	21.39371
05-IMG-04	18.01029	21.80682	18.85835	17.55853	21.65566
05-IMG-05	13.29989	16.93768	13.71186	12.84377	16.38401
06-IMG-01	15.88603	13.97598	16.87169	16.24294	14.01282
06-IMG-02	14.98621	13.21831	16.34204	16.14199	14.5498
06-IMG-03	14.73492	14.62096	15.66386	15.06948	13.97935
06-IMG-04	14.42706	18.24669	12.34256	13.41498	15.62406
06-IMG-05	14.69214	11.1893	16.07314	16.17594	13.06103
07-IMG-01	11.84966	15.21863	11.2161	11.73482	13.69759
07-IMG-02	12.2171	15.9877	11.30944	12.23037	13.92282
07-IMG-03	11.7327	16.14569	12.35905	13.10987	14.83444
07-IMG-04	10.48269	16.91027	11.69694	12.50091	15.38794
07-IMG-05	11.50537	15.6982	11.839	12.14471	15.09213
08-IMG-01	11.72361	14.77088	11.45709	10.38907	14.22713
08-IMG-02	14.21431	14.8481	14.64743	15.84464	13.75151
08-IMG-03	10.03404	14.29283	11.24738	9.511207	12.99789
08-IMG-04	13.33498	13.88376	13.01158	11.47206	13.08289
08-IMG-05	13.77627	14.28394	13.46642	14.27243	12.90674
09-IMG-01	16.89568	18.41918	16.54673	17.06956	16.86791
09-IMG-02	15.44069	16.45714	15.88677	15.38143	13.82687
09-IMG-03	13.93992	16.51043	13.94939	14.52688	15.02168
09-IMG-04	15.87221	19.15794	15.39875	15.466	16.28492
09-IMG-05	13.89846	13.36669	15.4728	16.35172	12.63456
10-IMG-01	20.46318	20.377	21.86819	19.10165	21.13894
10-IMG-02	20.43521	21.54166	20.10232	20.81121	21.18728
10-IMG-03	20.28806	21.49861	22.85974	18.9866	20.89984
10-IMG-04	22.45268	22.28225	25.57674	22.21967	22.6588
10-IMG-05	16.75899	14.25043	16.86888	18.93125	12.42353

Nilai maksimum Orang ke-4 yang ‘mirip’ = 6,021795
Nilai minimum Orang ke-4 yang ‘tidak mirip’ = 9,036263

5. Pengujian MHD Citra Latih Orang ke-5

	05-IMG-01	05-IMG-02	05-IMG-03	05-IMG-04	05-IMG-05
05-IMG-01	0	11.72103	11.26033	12.42298	15.30491
05-IMG-02	11.72103	0	6.179656	7.590343	6.982691
05-IMG-03	11.26033	6.179656	0	10.39705	9.086731
05-IMG-04	12.42298	7.590343	10.39705	0	12.09831
05-IMG-05	15.30491	6.982691	9.086731	12.09831	0
01-IMG-01	17.26519	17.13315	21.76908	17.18846	15.6792
01-IMG-02	17.74543	16.77358	23.01898	18.47242	15.32767
01-IMG-03	15.67956	16.74539	19.55901	15.91709	15.22058
01-IMG-04	15.57994	15.67558	20.36297	15.11557	15.04077
01-IMG-05	17.81385	17.17155	23.51748	19.35148	15.34335
02-IMG-01	17.57993	18.57402	25.96415	21.4456	17.40636
02-IMG-02	15.01235	16.42602	22.87322	19.15238	17.03558
02-IMG-03	16.7287	17.26675	25.91525	19.63924	17.50571
02-IMG-04	14.44117	16.85079	22.39934	17.73469	18.30877
02-IMG-05	16.49938	16.43278	25.0867	19.15883	16.50024
03-IMG-01	14.42255	15.26043	19.66119	18.13124	15.27533
03-IMG-02	18.29537	15.9981	27.91339	19.95029	16.1711
03-IMG-03	15.20284	14.52127	19.51363	18.45217	14.54217
03-IMG-04	13.67037	14.57103	17.24865	16.60316	15.02924
03-IMG-05	17.94926	16.41162	26.89426	21.95865	16.77463
04-IMG-01	16.50071	14.39925	20.84433	18.01029	13.29989
04-IMG-02	15.48953	15.21218	21.07656	21.80682	16.93768
04-IMG-03	16.60361	14.75932	19.9394	18.85835	13.71186
04-IMG-04	15.91683	13.58039	18.35649	17.55853	12.84377
04-IMG-05	16.29828	14.21392	21.39371	21.65566	16.38401
06-IMG-01	15.93467	14.65293	18.71702	17.95532	14.10752
06-IMG-02	14.57263	12.53179	15.86068	14.31445	12.40495
06-IMG-03	15.44081	14.54568	18.03575	17.92104	13.02242
06-IMG-04	15.80176	15.77272	23.4599	18.14461	16.67971
06-IMG-05	15.40463	15.45447	19.84052	19.46745	15.14782
07-IMG-01	17.06248	18.67245	26.44279	19.07874	20.19967
07-IMG-02	17.12277	19.15953	27.70532	18.79281	20.65105
07-IMG-03	18.24833	20.2881	28.78119	21.33249	18.93792
07-IMG-04	16.70786	20.31486	26.69611	20.47838	18.01873
07-IMG-05	17.29949	20.35446	27.72525	21.39403	19.37239
08-IMG-01	19.03286	14.56108	26.84025	18.44562	12.90821
08-IMG-02	20.82576	19.99199	29.55314	25.57631	18.98463
08-IMG-03	19.49603	16.00524	29.03455	19.47556	14.08362
08-IMG-04	18.39226	12.37474	25.35898	17.47627	11.46041
08-IMG-05	20.46565	21.15772	31.1395	25.06684	19.75796
09-IMG-01	16.43667	18.49605	27.60207	21.29114	19.57659
09-IMG-02	16.71335	17.41955	24.49294	22.97757	20.33434
09-IMG-03	17.26446	15.85791	26.92256	21.05488	17.80001
09-IMG-04	17.79568	18.33143	28.88678	21.87141	20.03109
09-IMG-05	17.50541	17.75576	25.33191	23.15265	19.52429
10-IMG-01	14.12637	14.04699	16.74196	12.58901	14.79315
10-IMG-02	21.99849	21.29094	26.73973	19.03164	19.96512
10-IMG-03	18.73188	14.8735	26.48463	18.3716	16.08936
10-IMG-04	19.28011	15.896	21.39359	18.35568	15.96362
10-IMG-05	20.81547	19.61095	27.94789	19.32486	17.93175

Nilai maksimum Orang ke-5 yang ‘mirip’ = 11,26033
Nilai minimum Orang ke-5 yang ‘tidak mirip’ = 11,46041

6. Pengujian MHD Citra Latih Orang ke-6

	06-IMG-01	06-IMG-02	06-IMG-03	06-IMG-04	06-IMG-05
06-IMG-01	0	5.548888	4.608336	13.70057	8.630068
06-IMG-02	5.548888	0	7.554968	13.9884	6.426439
06-IMG-03	4.608336	7.554968	0	14.45177	9.813811
06-IMG-04	13.70057	13.9884	14.45177	0	15.65385
06-IMG-05	8.630068	6.426439	9.813811	15.65385	0
01-IMG-01	11.52362	13.78016	13.13916	13.27314	13.93403
01-IMG-02	12.59492	14.21693	14.21387	12.84339	14.06979
01-IMG-03	13.46731	14.09315	14.56879	15.27788	14.45191
01-IMG-04	14.49215	14.35269	15.80412	13.37404	14.87607
01-IMG-05	12.67228	14.54491	14.11219	12.86605	13.34092
02-IMG-01	14.00629	16.17111	12.8927	12.94236	15.8585
02-IMG-02	14.07606	14.21119	14.23906	12.66797	15.13623
02-IMG-03	14.73866	16.45244	13.59632	12.13497	16.08163
02-IMG-04	14.27966	14.89672	13.83932	13.62144	15.55801
02-IMG-05	14.70737	14.15213	13.51853	12.8206	15.13638
03-IMG-01	11.26178	11.20169	10.17626	13.94291	10.44838
03-IMG-02	13.75117	15.6417	12.71711	10.42798	13.52934
03-IMG-03	12.56525	13.80674	13.54614	10.73213	14.45985
03-IMG-04	11.89604	11.53694	11.93422	12.56385	14.08934
03-IMG-05	12.69613	14.59189	13.5063	10.06826	14.37698
04-IMG-01	15.88603	14.98621	14.73492	14.42706	14.69214
04-IMG-02	13.97598	13.21831	14.62096	18.24669	11.1893
04-IMG-03	16.87169	16.34204	15.66386	12.34256	16.07314
04-IMG-04	16.24294	16.14199	15.06948	13.41498	16.17594
04-IMG-05	14.01282	14.5498	13.97935	15.62406	13.06103
05-IMG-01	15.93467	14.57263	15.44081	15.80176	15.40463
05-IMG-02	14.65293	12.53179	14.54568	15.77272	15.45447
05-IMG-03	18.71702	15.86068	18.03575	23.4599	19.84052
05-IMG-04	17.95532	14.31445	17.92104	18.14461	19.46745
05-IMG-05	14.10752	12.40495	13.02242	16.67971	15.14782
07-IMG-01	14.40247	15.847	14.28738	13.23503	14.50825
07-IMG-02	15.22031	16.11166	14.75555	12.548	15.34165
07-IMG-03	13.9438	16.33989	15.05671	12.51848	16.98411
07-IMG-04	14.91894	16.96895	15.80355	12.85368	18.00253
07-IMG-05	13.93598	16.49281	15.31902	13.19231	16.2307
08-IMG-01	15.79508	12.93165	14.51828	12.12003	13.13689
08-IMG-02	12.85961	15.04365	14.45054	13.81502	13.89821
08-IMG-03	17.27782	13.65862	14.85942	12.41244	13.40778
08-IMG-04	16.73157	13.19167	14.76481	12.50078	14.22321
08-IMG-05	15.71494	15.02757	15.1392	15.81684	13.69854
09-IMG-01	18.94896	19.0442	18.98086	12.79913	17.60922
09-IMG-02	14.6973	16.95778	14.50459	13.23652	15.52312
09-IMG-03	18.40121	16.46992	16.73703	13.52166	15.8027
09-IMG-04	18.31369	18.96302	16.58655	13.65594	18.09423
09-IMG-05	14.67851	13.96005	14.64314	17.84636	14.50286
10-IMG-01	16.45186	13.28575	15.3828	20.51684	17.4573
10-IMG-02	17.3078	19.77278	17.50995	17.9617	18.7855
10-IMG-03	17.1266	16.52229	15.55961	19.18513	17.79368
10-IMG-04	16.05349	13.36204	14.28166	22.91444	18.09134
10-IMG-05	13.65412	17.47114	13.88065	17.32208	15.533

Nilai maksimum Orang ke-6 yang ‘mirip’ = 9,813811
Nilai minimum Orang ke-6 yang ‘tidak mirip’ = 10,06826

7. Pengujian MHD Citra Latih Orang ke-7

	07-IMG-01	07-IMG-02	07-IMG-03	07-IMG-04	07-IMG-05
07-IMG-01	0	2.28571	9.811828	11.16313	8.690875
07-IMG-02	2.28571	0	9.270722	11.56998	9.311802
07-IMG-03	9.811828	9.270722	0	2.880401	3.235662
07-IMG-04	11.16313	11.56998	2.880401	0	3.477942
07-IMG-05	8.690875	9.311802	3.235662	3.477942	0
01-IMG-01	13.21752	13.20424	10.24419	9.831134	11.29002
01-IMG-02	13.8278	14.03269	11.01349	10.40581	10.75182
01-IMG-03	14.46823	14.50825	11.98299	11.2556	12.03065
01-IMG-04	13.69931	13.73908	12.78967	11.9664	11.94774
01-IMG-05	14.38713	14.62039	10.98551	10.25959	11.01538
02-IMG-01	10.25717	10.16359	10.06522	10.07485	9.570222
02-IMG-02	9.899261	10.28277	10.20344	9.914275	8.714188
02-IMG-03	9.059833	9.721084	10.20795	10.18398	9.650689
02-IMG-04	9.319278	10.2862	12.13798	12.01104	11.38852
02-IMG-05	10.17899	10.5544	9.827537	10.17716	8.663402
03-IMG-01	13.53079	13.74065	15.00519	14.49437	13.8491
03-IMG-02	14.81695	14.75397	13.11262	13.49178	13.62891
03-IMG-03	12.31054	12.91763	11.68044	10.70713	11.07015
03-IMG-04	13.50247	14.54736	16.59879	15.62143	15.84184
03-IMG-05	15.55048	15.73552	12.88706	13.33079	13.58958
04-IMG-01	11.84966	12.2171	11.7327	10.48269	11.50537
04-IMG-02	15.21863	15.9877	16.14569	16.91027	15.6982
04-IMG-03	11.2161	11.30944	12.35905	11.69694	11.839
04-IMG-04	11.73482	12.23037	13.10987	12.50091	12.14471
04-IMG-05	13.69759	13.92282	14.83444	15.38794	15.09213
05-IMG-01	17.06248	17.12277	18.24833	16.70786	17.29949
05-IMG-02	18.67245	19.15953	20.2881	20.31486	20.35446
05-IMG-03	26.44279	27.70532	28.78119	26.69611	27.72525
05-IMG-04	19.07874	18.79281	21.33249	20.47838	21.39403
05-IMG-05	20.19967	20.65105	18.93792	18.01873	19.37239
06-IMG-01	14.40247	15.22031	13.9438	14.91894	13.93598
06-IMG-02	15.847	16.11166	16.33989	16.96895	16.49281
06-IMG-03	14.28738	14.75555	15.05671	15.80355	15.31902
06-IMG-04	13.23503	12.548	12.51848	12.85368	13.19231
06-IMG-05	14.50825	15.34165	16.98411	18.00253	16.2307
08-IMG-01	17.22986	16.71436	15.71662	15.52198	16.31136
08-IMG-02	14.07851	14.12893	11.6669	12.35949	12.64534
08-IMG-03	16.45672	15.75851	13.82758	13.6177	14.40868
08-IMG-04	16.2626	16.08204	16.74806	17.07022	17.43489
08-IMG-05	15.05616	14.96034	13.4216	13.98257	13.64787
09-IMG-01	13.76108	14.10304	13.83022	14.4874	14.74801
09-IMG-02	10.23965	11.34294	12.79643	14.38865	12.49188
09-IMG-03	10.66948	10.81895	13.42078	14.06909	13.01193
09-IMG-04	12.38024	12.82065	15.27666	16.10952	15.25524
09-IMG-05	9.891212	12.01479	12.09176	11.71656	11.09592
10-IMG-01	22.16157	23.30653	23.73559	21.83059	22.68487
10-IMG-02	19.71764	19.31307	17.67137	16.87064	19.26539
10-IMG-03	20.16454	20.12189	21.73169	21.11684	21.91941
10-IMG-04	22.63916	22.96814	25.45103	24.22588	24.84198
10-IMG-05	16.9002	16.49816	13.88562	13.67047	14.90154

Nilai maksimum Orang ke-7 yang ‘mirip’ = 3,477942
Nilai minimum Orang ke-7 yang ‘tidak mirip’ = 8,663402

8. Pengujian MHD Citra Latih Orang ke-8

08-IMG-01	08-IMG-02	08-IMG-03	08-IMG-04	08-IMG-05	08-IMG-01
0	13.9881	2.552602	4.750025	10.89322	0
13.9881	0	13.76374	14.93834	4.542045	13.9881
2.552602	13.76374	0	6.379841	10.85139	2.552602
4.750025	14.93834	6.379841	0	12.27301	4.750025
10.89322	4.542045	10.85139	12.27301	0	10.89322
14.21051	12.36786	15.908	15.92873	14.43426	14.21051
12.54943	10.20389	13.11087	12.86308	11.73562	12.54943
11.86108	12.70921	13.03753	12.82147	13.31726	11.86108
11.6712	11.34383	13.03322	12.60676	12.32093	11.6712
12.62506	10.41895	13.29353	13.33937	11.74409	12.62506
14.55439	12.599	12.77144	14.41425	12.78381	14.55439
15.64611	15.00761	14.09736	16.55292	15.55529	15.64611
15.64834	14.67234	14.39288	14.58785	14.70284	15.64834
16.39986	13.08325	15.50474	16.09327	15.54293	16.39986
15.44834	15.76372	13.83347	15.89997	15.71932	15.44834
11.36174	17.22259	10.43018	12.75075	15.88723	11.36174
13.45058	15.04156	12.31495	14.01397	15.28478	13.45058
13.09719	14.88303	12.45658	13.93546	15.80135	13.09719
13.3888	18.89723	13.33656	12.66288	18.1164	13.3888
13.24579	12.82214	12.47689	13.9783	13.99883	13.24579
11.72361	14.21431	10.03404	13.33498	13.77627	11.72361
14.77088	14.8481	14.29283	13.88376	14.28394	14.77088
11.45709	14.64743	11.24738	13.01158	13.46642	11.45709
10.38907	15.84464	9.511207	11.47206	14.27243	10.38907
14.22713	13.75151	12.99789	13.08289	12.90674	14.22713
19.03286	20.82576	19.49603	18.39226	20.46565	19.03286
14.56108	19.99199	16.00524	12.37474	21.15772	14.56108
26.84025	29.55314	29.03455	25.35898	31.1395	26.84025
18.44562	25.57631	19.47556	17.47627	25.06684	18.44562
12.90821	18.98463	14.08362	11.46041	19.75796	12.90821
15.79508	12.85961	17.27782	16.73157	15.71494	15.79508
12.93165	15.04365	13.65862	13.19167	15.02757	12.93165
14.51828	14.45054	14.85942	14.76481	15.1392	14.51828
12.12003	13.81502	12.41244	12.50078	15.81684	12.12003
13.13689	13.89821	13.40778	14.22321	13.69854	13.13689
17.22986	14.07851	16.45672	16.2626	15.05616	17.22986
16.71436	14.12893	15.75851	16.08204	14.96034	16.71436
15.71662	11.6669	13.82758	16.74806	13.4216	15.71662
15.52198	12.35949	13.6177	17.07022	13.98257	15.52198
16.31136	12.64534	14.40868	17.43489	13.64787	16.31136
15.65038	16.05857	14.73697	15.39139	16.69978	15.65038
17.13977	15.74879	16.4077	16.47736	17.5	17.13977
14.97445	14.29409	13.55531	13.55335	15.9282	14.97445
16.63097	17.24883	15.55628	15.48701	17.78121	16.63097
17.76156	17.15032	15.99414	17.66492	18.82602	17.76156
21.21181	25.2433	22.32248	20.6324	24.85014	21.21181
24.36292	17.67638	25.4501	24.74508	19.32105	24.36292
22.05447	19.58286	21.7829	20.46527	20.04184	22.05447
22.22396	25.39766	22.64604	21.42056	23.64203	22.22396
17.6396	14.54556	17.31872	17.73964	14.46124	17.6396

Nilai maksimum Orang ke-8 yang ‘mirip’ = 6,379841
Nilai minimum Orang ke-8 yang ‘tidak mirip’ = 9,511207

9. Pengujian MHD Citra Latih Orang ke-9

	09-IMG-01	09-IMG-02	09-IMG-03	09-IMG-04	09-IMG-05
09-IMG-01	0	8.915977	6.148153	4.27535	13.87588
09-IMG-02	8.915977	0	7.504085	5.182089	10.66525
09-IMG-03	6.148153	7.504085	0	5.875473	11.5827
09-IMG-04	4.27535	5.182089	5.875473	0	13.35031
09-IMG-05	13.87588	10.66525	11.5827	13.35031	0
01-IMG-01	14.90731	17.63012	16.93677	15.54292	15.05702
01-IMG-02	14.93894	16.95212	15.11609	16.00141	16.00987
01-IMG-03	15.18254	17.32218	15.08883	16.42723	15.19314
01-IMG-04	14.95798	17.36768	14.97552	16.24907	16.12544
01-IMG-05	15.12179	16.9241	15.93143	15.95266	15.42142
02-IMG-01	13.69665	14.31251	13.45345	14.38022	13.34375
02-IMG-02	16.5488	13.47306	13.31157	15.74157	10.45569
02-IMG-03	14.93274	12.74872	13.47631	13.89231	12.49566
02-IMG-04	14.97489	11.31842	11.90598	13.31305	10.70647
02-IMG-05	15.47224	14.528	13.03672	15.03398	10.60017
03-IMG-01	13.81991	12.00824	12.69475	13.70955	10.65247
03-IMG-02	12.65932	12.35093	13.12837	12.24342	16.6548
03-IMG-03	13.8732	11.38276	11.37029	13.28942	11.99278
03-IMG-04	12.79606	12.74536	12.57421	14.0032	12.63851
03-IMG-05	13.17881	11.27039	12.40056	13.23412	15.41024
04-IMG-01	16.89568	15.44069	13.93992	15.87221	13.89846
04-IMG-02	18.41918	16.45714	16.51043	19.15794	13.36669
04-IMG-03	16.54673	15.88677	13.94939	15.39875	15.4728
04-IMG-04	17.06956	15.38143	14.52688	15.466	16.35172
04-IMG-05	16.86791	13.82687	15.02168	16.28492	12.63456
05-IMG-01	16.43667	16.71335	17.26446	17.79568	17.50541
05-IMG-02	18.49605	17.41955	15.85791	18.33143	17.75576
05-IMG-03	27.60207	24.49294	26.92256	28.88678	25.33191
05-IMG-04	21.29114	22.97757	21.05488	21.87141	23.15265
05-IMG-05	19.57659	20.33434	17.80001	20.03109	19.52429
06-IMG-01	18.94896	14.6973	18.40121	18.31369	14.67851
06-IMG-02	19.0442	16.95778	16.46992	18.96302	13.96005
06-IMG-03	18.98086	14.50459	16.73703	16.58655	14.64314
06-IMG-04	12.79913	13.23652	13.52166	13.65594	17.84636
06-IMG-05	17.60922	15.52312	15.8027	18.09423	14.50286
07-IMG-01	13.76108	10.23965	10.66948	12.38024	9.891212
07-IMG-02	14.10304	11.34294	10.81895	12.82065	12.01479
07-IMG-03	13.83022	12.79643	13.42078	15.27666	12.09176
07-IMG-04	14.4874	14.38865	14.06909	16.10952	11.71656
07-IMG-05	14.74801	12.49188	13.01193	15.25524	11.09592
08-IMG-01	15.65038	17.13977	14.97445	16.63097	17.76156
08-IMG-02	16.05857	15.74879	14.29409	17.24883	17.15032
08-IMG-03	14.73697	16.4077	13.55531	15.55628	15.99414
08-IMG-04	15.39139	16.47736	13.55335	15.48701	17.66492
08-IMG-05	16.69978	17.5	15.9282	17.78121	18.82602
10-IMG-01	25.83636	24.08306	24.51412	27.24693	22.33194
10-IMG-02	24.23772	24.50484	24.28559	22.08697	24.70092
10-IMG-03	22.27677	20.26424	22.48135	20.56232	22.96229
10-IMG-04	29.59368	26.0452	27.48672	29.0865	25.16479
10-IMG-05	18.36729	17.4872	20.10661	19.12332	15.74732

Nilai maksimum Orang ke-9 yang ‘mirip’ = 8,915977
Nilai minimum Orang ke-9 yang ‘tidak mirip’ = 9,891212

10. Pengujian MHD Citra Latih Orang ke-10

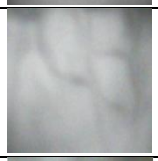
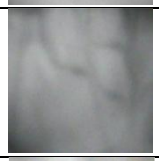
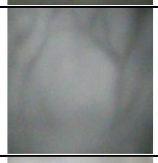
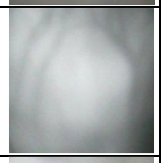
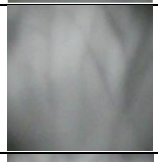
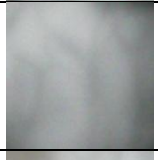
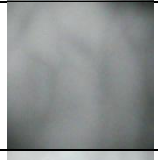
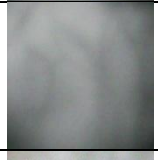
	10-IMG-01	10-IMG-02	10-IMG-03	10-IMG-04	10-IMG-05
10-IMG-01	0	15.01643	17.61351	9.09631	15.86135
10-IMG-02	15.01643	0	11.66536	15.38738	6.005824
10-IMG-03	17.61351	11.66536	0	14.79703	13.23052
10-IMG-04	9.09631	15.38738	14.79703	0	15.49641
10-IMG-05	15.86135	6.005824	13.23052	15.49641	0
01-IMG-01	18.50122	16.35028	18.91662	21.57783	14.32708
01-IMG-02	19.27571	16.45551	19.19702	21.3676	14.63598
01-IMG-03	16.32355	16.94348	20.00976	20.03181	14.98744
01-IMG-04	16.77104	16.41297	20.0568	19.74591	15.27219
01-IMG-05	19.24273	16.28536	18.21964	21.13751	13.7479
02-IMG-01	22.29532	17.42462	17.88931	23.56394	14.55155
02-IMG-02	17.82719	16.57068	19.78879	19.80567	14.95835
02-IMG-03	21.69005	16.82841	18.79463	21.77838	14.30973
02-IMG-04	17.26659	18.7683	19.69052	19.73195	15.13341
02-IMG-05	19.14262	16.95195	20.4021	20.50629	13.95215
03-IMG-01	15.47722	20.85807	19.48078	19.27768	14.21483
03-IMG-02	25.12633	20.41149	17.95513	26.02402	17.96314
03-IMG-03	18.39118	20.89487	20.49773	21.73805	14.9114
03-IMG-04	16.12222	21.23946	17.12119	18.11638	17.60154
03-IMG-05	26.47486	22.87938	19.60489	27.69979	17.67076
04-IMG-01	20.46318	20.43521	20.28806	22.45268	16.75899
04-IMG-02	20.377	21.54166	21.49861	22.28225	14.25043
04-IMG-03	21.86819	20.10232	22.85974	25.57674	16.86888
04-IMG-04	19.10165	20.81121	18.9866	22.21967	18.93125
04-IMG-05	21.13894	21.18728	20.89984	22.6588	12.42353
05-IMG-01	14.12637	21.99849	18.73188	19.28011	20.81547
05-IMG-02	14.04699	21.29094	14.8735	15.896	19.61095
05-IMG-03	16.74196	26.73973	26.48463	21.39359	27.94789
05-IMG-04	12.58901	19.03164	18.3716	18.35568	19.32486
05-IMG-05	14.79315	19.96512	16.08936	15.96362	17.93175
06-IMG-01	16.45186	17.3078	17.1266	16.05349	13.65412
06-IMG-02	13.28575	19.77278	16.52229	13.36204	17.47114
06-IMG-03	15.3828	17.50995	15.55961	14.28166	13.88065
06-IMG-04	20.51684	17.9617	19.18513	22.91444	17.32208
06-IMG-05	17.4573	18.7855	17.79368	18.09134	15.533
07-IMG-01	22.16157	19.71764	20.16454	22.63916	16.9002
07-IMG-02	23.30653	19.31307	20.12189	22.96814	16.49816
07-IMG-03	23.73559	17.67137	21.73169	25.45103	13.88562
07-IMG-04	21.83059	16.87064	21.11684	24.22588	13.67047
07-IMG-05	22.68487	19.26539	21.91941	24.84198	14.90154
08-IMG-01	21.21181	24.36292	22.05447	22.22396	17.6396
08-IMG-02	25.2433	17.67638	19.58286	25.39766	14.54556
08-IMG-03	22.32248	25.4501	21.7829	22.64604	17.31872
08-IMG-04	20.6324	24.74508	20.46527	21.42056	17.73964
08-IMG-05	24.85014	19.32105	20.04184	23.64203	14.46124
09-IMG-01	25.83636	24.23772	22.27677	29.59368	18.36729
09-IMG-02	24.08306	24.50484	20.26424	26.0452	17.4872
09-IMG-03	24.51412	24.28559	22.48135	27.48672	20.10661
09-IMG-04	27.24693	22.08697	20.56232	29.0865	19.12332
09-IMG-05	22.33194	24.70092	22.96229	25.16479	15.74732

Nilai maksimum Orang ke-10 yang ‘mirip’ = 11,66536
Nilai minimum Orang ke-10 yang ‘tidak mirip’ = 12,42353

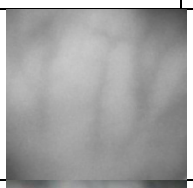
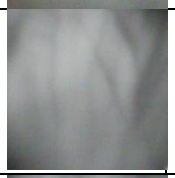
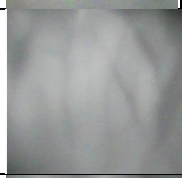
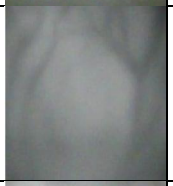
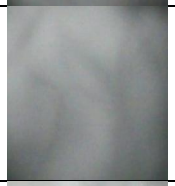
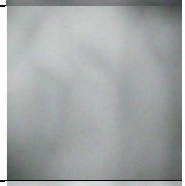
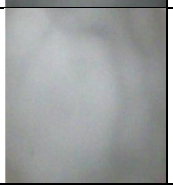
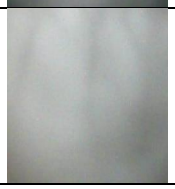
LAMPIRAN D

KUMPULAN CITRA

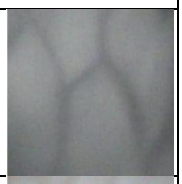
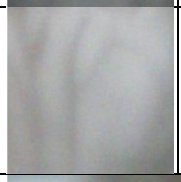
(a)Citra Latih Database

Citra Ke / Orang Ke	01	02	03	04	05
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					

(b) Citra uji dari individu yang ada dalam database

Citra ke / Orang	06	07	Citra ke / Orang	06	07
01			06		
02			07		
03			08		
04			09		
05			10		

(c) Citra uji dari individu yang tidak ada dalam database

Citra ke / Orang	01	02
11		
12		
13		
14		
15