

## LAMPIRAN

### LAMPIRAN 1

#### Kode program model ANN

<pre> clear all;clc;close all data=importdata('coba_train.txt'); % jumlah kolom training p=data(:,1:3); P=p'; t=data(:,4); T=t'  %Preprocessing [pn,meanp,stdp,tn,meant,stdt]=prestd(P,T); %Membangun Jaringan Syaraf Feedforward net=newff(minmax(pn),[10 1],{'tansig','logsig','trainbr'}); bobot1=0.5+(-0.5-0.5)*rand(10,3); net.IW{1,1}=bobot1; bias1=0.5+(-0.5-0.5)*rand(10,1); net.b{1,1}=bias1; bobot2=0.5+(-0.5-0.5)*rand(1,10); net.LW{2,1}=bobot2; bias2=0.5+(-0.5-0.5)*rand(1,1); net.b{2,1}=bias2; net.trainParam.epochs=1000; net.performFcn = 'mse'; net.trainParam.goal = 0.001; net.trainParam.show = 30; net.trainParam.epochs = 10000; net.trainParam.mc = 0.95; net.trainParam.lr = 0.1;  % Melakukan Pembelajaran net=train(net,pn,tn);pause  % Melihat Bobot-Bobot Awal Input, Lapisan Dan Bias BobotAkhir_Input = net.IW{1,1} BobotAkhir_Bias_Input = net.b{1,1} BobotAkhir_Lapisan1 = net.LW{2,1} BobotAkhir_Bias_Lapisan1 = net.b{2,1} </pre>	<pre> % Melakukan Simulasi an = sim(net,pn); a = poststd(an,meant,stdt); H = [(1:size(P,2))' T' a' (T'-a')]; sprintf('%2d %9.2f %7.2f %5.2f\n',H')  % Evaluasi Output Jaringan (Data Pelatihan Dengan Target) [m1,a1,r1]=postreg(a,T) pause plot([1:size(P,2)]',T,'-bo',[1:size(P,2)]',a,'-r*'); title('Hasil Pengujian Dengan Data Pelatihan: Target(o), Output(*)'); xlabel('Data Ke-');ylabel('Target/Output');pause  % Input Baru Q akan di Tes, Dengan target PQ Cek=importdata('coba_test.txt');  Q=Cek(:,1:3)'; TQ=Cek(:,4)';  % Normalisasi Input Baru Qn=trastd(Q,meanp,stdp); bn=sim(net,Qn); b=poststd(bn,meant,stdt); L=[(1:size(Q,2))' TQ' b' (TQ'-b')]; sprintf('%2d %11.2f %9.2f %7.2f\n',L)  % Evaluasi Output Jaringan (Data Testing Dengan Target) [m2,b1,r2]=postreg(b,TQ) pause k=[1:size(Q,2)]'; plot(k,TQ,'-bo',k,b,'-r*'); title('Hasil Pengujian Dengan Data Uji: Target(o), Output(*)'); xlabel('Data Ke-');ylabel('Target/Output'); text(k+0.2*ones(length(k),1),TQ,int2str(k)); </pre>
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% ..... PREDIKSI .....  

data=importdata('estimasi.txt');  

% jumlah kolom training  

u=data(:,1:3);  

U=u';  

  

dat_lengkapn = trastd(U,meanp,stdp);  

predn = sim(net,dat_lengkapn);  

pred = poststd(predn,meant,stdt);  

pred=pred(1:24);  

pause  

k=1:24;  

% k = 1:size(P,2);  

plot(k,pred);  

title('Estimasi');  

xlabel('Jam ke-');  

ylabel('PASUT');

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## LAMPIRAN 2

### Hasil kalibrasi AWS tanjung priok tahun 2020

UNIVERSITAS

#### 2. PERALATAN AWS Maritim Tanjung Priok

No.	Nama Sensor	Merk/Type/No	Koreksi	Keterangan
1.	Logger	Campbell Scientific/CR 1000	-	Laik Operasional
2.	Temperatur & Kelembaban (RH)	Vaisala / HMP 155 / S.N 04155000	T : -0.04 °C RH : -1.26 %	Laik Operasional
3.	Anemometer	RM Young/ Wind-Sentry/03002	-1.54 m/s 2.19 derajat	Laik Operasional
4.	Barometer	Vaisala/PTB110	-0.05 mb	Laik Operasional
5.	Tipping Bucket	Hyquest Solutions/TB3 Sn.17-208/	-0.21 mm	Laik Operasional
6.	Pyranometer	Kipp & Zonen / SN.125821	-	Laik Operasional
7	Water Temperature	CS451/28790-1068/70012549	-0.09°C	Laik Operasional