

Lampiran 1 Data pelatihan dari tahun 1970 hingga tahun 2008

Tahun	GC	P_RICE	P_GASOL	YJPN
1969	13873,92			
1970	16216,32			
1971	17369,06	44,0000000000	30,0000000000	
1972	18796,65	51,0000000000	35,0000000000	
1973	23994,24	81,0000000000	41,0000000000	
1974	21480,81	91,0000000000	46,0000000000	
1975	27998,7	111,0000000000	57,0000000000	
1976	30047,63	137,0000000000	70,0000000000	
1977	34999,4	141,0000000000	70,0000000000	
1978	41159,14	146,0000000000	70,0000000000	
1979	45073,03	181,0000000000	100,0000000000	
1980	49918,77	218,0000000000	150,0000000000	313140,0000000000
1981	54992,66	243,0000000000	150,0000000000	322325,9000000000
1982	59520	263,0000000000	240,0000000000	331236,1000000000
1983	58943,79	294,0000000000	320,0000000000	336575,0000000000
1984	61006,29	310,0000000000	350,0000000000	347072,6000000000
1985	68654,2	307,0000000000	385,0000000000	364712,2000000000
1986	68691,44	335,0000000000	385,0000000000	375502,9000000000
1987	67679,75	369,0000000000	385,0000000000	389753,1000000000

1988	72831,27	458,0000000000	385,0000000000	416119,2000000000
1989	80335,29	476,0000000000	385,0000000000	438135,6000000000
1990	84219,21	515,0000000000	450,0000000000	460925,2000000000
1991	88651,88	568,0000000000	550,0000000000	476369,4000000000
1992	93728,92	611,0000000000	550,0000000000	480999,7000000000
1993	93900,27	640,0000000000	700,0000000000	482190,5000000000
1994	96064,7	744,0000000000	700,0000000000	487487,9000000000
1995	97352,19	936,0000000000	700,0000000000	496911,6000000000
1996	99973,86	983,0000000000	700,0000000000	513893,2000000000
1997	100035,1	1095,0000000000	700,0000000000	523421,1000000000
1998	84658,15	2249,0000000000	1000,0000000000	517515,3000000000
1999	85246,35	3139,0000000000	1000,0000000000	517810,6000000000
2000	90779,7	2933,0000000000	1150,0000000000	532541,8000000000
2001	97646	3035,0000000000	1325,0000000000	534851,5000000000
2002	110333,6	3583,0000000000	1730,0000000000	533041,6000000000
2003	121404,1	3405,5158333333	1810,0000000000	540286,5335800540
2004	126248,7	3505,2620000000	1810,0000000000	554874,2699867160
2005	134625,6	3838,5775000000	2826,6666666667	565605,5383682590
2006	147563,7	4000,0000000000	4500,0000000000	579314,1198016900
2007	153309,6	4400,0000000000	4500,0000000000	591093,3137996180
2008	169297,2	5000,0000000000	5916,6666666667	594048,7803686160

Tahun	YUSA	NXO	ER	GDP
1969			382,9600000000	
1970	3771,9000000000		379,0000000000	245368,2976866200
1971	3898,6000000000		389,7500000000	245169,9858480760
1972	4105,0000000000		413,5800000000	272596,4706238550
1973	4341,5000000000		414,1700000000	309006,3587489680
1974	4319,6000000000		415,7500000000	328616,1691897420
1975	4311,2000000000		415,6700000000	348080,4579709310
1976	4540,9000000000		415,0000000000	376137,7843832550
1977	4750,5000000000		415,1700000000	412872,7848595930
1978	5015,0000000000		446,4200000000	441757,4419079020
1979	5173,4000000000		630,7800000000	468739,9661343310
1980	5161,7000000000		631,7800000000	510343,7317803120
1981	5291,7000000000		636,5800000000	546392,5289957220
1982	5189,3000000000		666,4000000000	548704,6318131040
1983	5423,8000000000		906,1500000000	571112,8581812970
1984	5813,6000000000		1026,5700000000	616038,9267463610
1985	6053,7000000000	124066,6167965620	1110,1200000000	638044,8962182150
1986	6263,6000000000	146274,5077493480	1288,8400000000	685104,8486726480
1987	6475,1000000000	134356,8699557200	1644,2800000000	729413,6620115310
1988	6742,7000000000	126604,9829768530	1687,2600000000	778293,2381150230

1989	6981,4000000000	137827,6019468950	1771,6500000000	849093,7643696880
1990	7112,5000000000	136316,4064197360	1848,2700000000	925909,2462127430
1991	7100,5000000000	155290,2147971440	1951,1200000000	1010340,2154682700
1992	7336,6000000000	155547,1150346510	2031,3500000000	1081387,8988756600
1993	7532,7000000000	154563,9805919890	2087,1500000000	1156497,2125466200
1994	7835,5000000000	173074,6981128180	2163,2300000000	1244467,1039362100
1995	8031,7000000000	175231,4567075120	2252,8300000000	1347041,5708815200
1996	8328,9000000000	169507,1762953470	2347,3400000000	1451727,6781261200
1997	8703,5000000000	168839,2389166060	2951,7500000000	1518293,0044561400
1998	9066,9000000000	155887,3125194290	9874,5900000000	1317280,5099835900
1999	9470,3000000000	147197,8832752900	7808,9200000000	1325351,8904493200
2000	9817,0000000000	131698,5278472090	8534,4200000000	1389769,9000000000
2001	9890,7000000000	136609,6831314300	10265,6700000000	1440405,7000000000
2002	10048,8000000000	129922,4869307990	9261,1700000000	1505216,4000000000
2003	10320,6000000000	133358,5498526890	8571,1700000000	1577171,3000000000
2004	10692,1416000000	111939,5793069280	8985,4166666667	1656516,8000000000
2005	11006,3194887744	108334,4390436800	9750,5833333333	1750815,2000000000
2006	11312,0860504920	108931,8761449980	9219,5000000000	1847126,7000000000
2007	11541,5404039402	100071,9961887680	9163,6666666667	1963091,8000000000
2008	11703,1219695954	98777,3307540876	10000,0000000000	2082128,7000000000

Sumber : BPS, Bank Indonesia dan Bank Dunia.

Lampiran 2 Tampilan aplikasi yang digunakan untuk peramalan ANN

Visual Query
SISTEM INFORMASI GEOGRAFI
Persentase Kemiskinan Per Propinsi Tahun 2007

HOME FORECAST NEURAL NETWORK VISUALISASI HELP

GMDH Neural Network
Data Pelatihan Sampai tahun : 2004 Proses

BSGWARE

Neural Network 200

Halaman untuk peramalan *multivariate* menggunakan ANN GMDH

Visual Query
SISTEM INFORMASI GEOGRAFI
Persentase Kemiskinan Per Propinsi Tahun 2007

HOME FORECAST NEURAL NETWORK VISUALISASI HELP

Backpropagation Neural Network
Momentum : 0.8 Learning : 0.25 Jumlah Hidden Neuron : 15 Data Pelatihan Sampai tahun : 2004 Proses

BSGWARE

Neural Network 2009

Halaman untuk peramalan *multivariate* menggunakan ANN *Feedforward backpropagation*

SISTEM INFORMASI GEOGRAFI

Persentase Kemiskinan Per Provinsi Tahun 2007

Legend: ■ Tinggi, ■ Sedang, ■ Rendah

Inflasi Indone

Bulan	Inflasi
Jan	1.17
Feb	0.65
Mar	0.95
Apr	0.57
Mei	1.41
Jun	2.46

Elman Recurrent Neural Network

Momentum : 0.8 Learning : 0.25 Jumlah Hidden Neuron : 6 Data Pelatihan Sampai tahun : 2004

BSGWARE

Neural Network 2009

Halaman untuk peramalan *multivariate* menggunakan ANN *Elman recurrent*

SISTEM INFORMASI GEOGRAFI

Persentase Kemiskinan Per Provinsi Tahun 2007

Legend: ■ Tinggi, ■ Sedang, ■ Rendah

Inflasi Indone

Bulan	Inflasi
Jan	1.17
Feb	0.65
Mar	0.95
Apr	0.57
Mei	1.41
Jun	2.46

GMDH Neural Network

Data Pelatihan : 2004

Series: 3 tahun 4 tahun 5 tahun

BSGWARE

Neural Network 200

Halaman untuk peramalan *univariate* menggunakan ANN GMDH

Visual Query
SISTEM INFORMASI GEOGRAFI
Persentase Kemiskinan Per Propinsi Tahun 2007

HOME FORECAST NEURAL NETWORK VISUALISASI HELP

Backpropagation Time Series
 Data Pelatihan : 2004 Momentum : 0.8 Learning : 0.25 Jumlah Hidden Neuron : 15
 Series 3 tahun 4 tahun 5 tahun
 Proses

BSGWARE

Neural Network 2009

Halaman untuk peramalan *univariate* menggunakan *Feedforward backpropagation*

Visual Query
SISTEM INFORMASI GEOGRAFI
Persentase Kemiskinan Per Propinsi Tahun 2007

HOME FORECAST NEURAL NETWORK VISUALISASI HELP

Elman Recurrent Neural Network
 Momentum : 0.8 Learning : 0.25 Jumlah Hidden Neuron : 6 Data Pelatihan Sampai tahun : 2004
 Proses

BSGWARE

Neural Network 2009

Halaman untuk peramalan *univariate* menggunakan ANN *Elman recurrent*

