Profile Summary
Generated 24-Feb-2015 11:32:49 using cpu time.

Function Name	Calls	Total Time	Self Time*
ANNkfoldver3b	1	140.746 s	0.018 s
network.train	10	138.823 s	0.019 s
trainlm.	210	138.276 s	0.000 s
trainIm>train_network_	10	138.276 s	67.019 s
network.train>trainPerWorker	10	138.276 s	0.000 s
nnCalcLib>nnCalcLib.perfsJEJJ	122	70.378 s	1.323 s
<u>perfsJEJJ</u>	122	69.055 s	0.016 s
perfsJEJJ>calc Y trainPerfJeJJ	122	68.925 s	52.966 s
jac_s.	122	15.628 s	9.360 s
perfsJEJJ>calc_jacobian	122	15.628 s	0.000 s
jac_s>reprow	366	2.284 s	2.284 s
jac_s>reprowint	366	2.262 s	2.262 s
dperf	122	1.402 s	1.353 s
network.subsasgn	520	1.351 s	0.032 s
newff>new_5p1	10	1.349 s	0.017 s
newff>create network	10	1.349 s	0.000 s
newff	10	1.349 s	0.000 s
network.subsasgn>network_subsasgn_	520	1.341 s	0.067 s
nnModuleInfo	631	0.968 s	0.505 s
nnCalcLib>nnCalcLib.trainPerf	189	0.453 s	0.082 s
setup1	31	0.444 s	0.016 s
setup1>setupImpl	31	0.428 s	0.006 s

Total Time Plot (dark band = self time) ı 1

<u>perfs</u>	189	0.371 s	0.047 s
trainPerf	189	0.371 s	0.000 s
@network\private\nn configure layer	90	0.361 s	0.017 s
<u>Y</u>	189	0.324 s	0.031 s
network.sim_	21	0.298 s	0.016 s
<u>setup</u>	10	0.285 s	0.000 s
nnCalcLib>nnCalcLib.setwb	189	0.283 s	0.171 s
transfer_fcn	210	0.276 s	0.000 s
parameter defaults	731	0.255 s	0.102 s
<u>y all</u>	122	0.250 s	0.049 s
tansig	180	0.240 s	0.016 s
ParamInfo>nnetParamInfo.nnetParamInfo	524	0.239 s	0.152 s
<u>netHints</u>	10	0.231 s	0.037 s
network.subsasgn>getDefaultParam	180	0.206 s	0.001 s
<u>y>calca</u>	189	0.194 s	0.050 s
network.sim>nncalc_setup_	21	0.189 s	0.000 s
@network\private\nn configure input	20	0.180 s	0.001 s
network.subsasgn>setLayerTransferFcn_	30	0.180 s	0.017 s
network.subsasgn>setTrainParam_	120	0.172 s	0.015 s
initlay	240	0.171 s	0.034 s
jac_s>stretch	122	0.170 s	0.170 s
@ne\private\nn configure input weight	60	0.170 s	-0.000 s
performance fcn	41	0.164 s	0.000 s
mse_	41	0.164 s	0.000 s
param>do_test	120	0.157 s	0.070 s
param	120	0.157 s	0.000 s
dotprod	60	0.153 s	0.001 s
weight_fcn	60	0.152 s	0.016 s
apply	933	0.149 s	0.149 s

perfsJEJJ>calc_perf_N	366	0.148 s	0.064 s
@ne\private\nn_configure_layer_weight	140	0.142 s	0.001 s
network.init	10	0.135 s	0.000 s
initnw>initialize layer	30	0.135 s	0.000 s
<u>initnw</u> .	80	0.135 s	0.000 s
initlay>initialize network	10	0.135 s	0.000 s
<u>info</u>	51	0.134 s	0.000 s
setwb	199	0.127 s	0.030 s
network.subsasgn>setInputProcessFcns	10	0.122 s	0.000 s
network.subsasgn>setLayerSize	20	0.119 s	0.000 s
network.subsasgn>setLayerDimensions	20	0.119 s	0.000 s
network.subsasgn>setLayerInitFcn	30	0.113 s	0.000 s
<u>setwb</u>	189	0.112 s	0.000 s
network.subsasgn>setInputExampleInput	10	0.112 s	0.000 s
info	70	0.107 s	0.003 s
network.network	550	0.105 s	0.051 s
removeconstantrows	60	0.100 s	0.001 s
parameterInfo	102	0.098 s	0.000 s
parameterInfo	120	0.090 s	0.000 s
process fcn	50	0.090 s	0.000 s
getParamStructFromArgs_	100	0.084 s	0.015 s
reverse	433	0.082 s	0.082 s
gmultiply	1287	0.082 s	0.001 s
separatewb	199	0.082 s	0.082 s
gmultiply>calc_cell_	1287	0.081 s	0.063 s
apply	933	0.079 s	0.079 s
options2Mode	31	0.076 s	0.000 s
@network\private\nn_configure_output	30	0.070 s	0.000 s
<u>info</u>	240	0.068 s	0.035 s

<u>y>reverse process</u>	189	0.067 s	0.001 s
y>post_outputs_	189	0.067 s	0.000 s
y all>calc pd	122	0.064 s	0.016 s
netHints	21	0.063 s	0.047 s
fixunknowns	30	0.063 s	0.000 s
feedback	132	0.063 s	0.048 s
grp2idx	13	0.062 s	0.015 s
defaultMode	62	0.061 s	0.000 s
options2Mode>MexOrMATLAB	31	0.061 s	0.000 s
<u>netHints</u>	31	0.059 s	0.055 s
mapminmax_	60	0.059 s	0.000 s
setup>setupPerWorker	10	0.056 s	0.020 s
setup	10	0.056 s	0.000 s
@network\private\nn update read only	520	0.055 s	0.055 s
network.network>new_network	10	0.054 s	0.000 s
network.subsasgn>setOutputProcessFcns	10	0.053 s	0.000 s
network.subsasgn>setOutputExampleOutput	10	0.053 s	0.000 s
transfer_fcn	240	0.052 s	0.052 s
purelin	30	0.052 s	0.000 s
parameterInfo	80	0.051 s	0.000 s
tapdelay	244	0.051 s	0.051 s
network.subsasgn>setInputConnect	20	0.050 s	0.000 s
num2str_	553	0.049 s	0.048 s
data	427	0.048 s	0.017 s
match.	1053	0.048 s	0.048 s
initnw>calcnw	30	0.048 s	0.017 s
<u>pc</u>	31	0.048 s	0.047 s
preCalcData	31	0.048 s	0.000 s
confusionmat	12	0.047 s	0.000 s
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<u>confusionmatStats</u>	12	0.047 s	0.000 s
network.subsasgn>setPerformFcn	10	0.047 s	0.000 s
<u>netCheck</u>	42	0.047 s	0.015 s
minmax	150	0.047 s	0.000 s
info	230	0.038 s	0.036 s
pos scalar	440	0.035 s	0.035 s
apply	933	0.035 s	0.035 s
wb_indices	145	0.034 s	0.034 s
nnetParamInfo>fcn2filename	524	0.033 s	0.033 s
weight fcn	230	0.033 s	0.033 s
nndata	122	0.033 s	0.032 s
y>active_fcns_	189	0.033 s	0.033 s
network.subsasgn>matchstring	740	0.032 s	0.032 s
gsubtract>calc_cell_	677	0.032 s	0.001 s
gsubtract	687	0.032 s	0.000 s
jac s>repcolint	122	0.032 s	0.032 s
pd	189	0.032 s	0.032 s
<u>crossvalind</u>	1	0.031 s	0.016 s
intmax	26	0.031 s	0.031 s
matrix data	231	0.031 s	0.016 s
create	20	0.031 s	0.015 s
gsubtract>calc_general_	677	0.031 s	0.031 s
network.sim>simDataCellOfMatrix	21	0.031 s	0.031 s
<u>update</u>	122	0.031 s	0.031 s
data>type_check_	427	0.031 s	0.000 s
normr	30	0.031 s	0.031 s
randnr>new value from rows cols	30	0.031 s	0.000 s
randnr	30	0.031 s	0.000 s
network.sim>simData	21	0.031 s	0.000 s

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setup2	31	0.030 s	0.000 s	
string.	2126	0.018 s	0.017 s	
num scalar	240	0.018 s	0.018 s	
strict pos int inf scalar	120	0.018 s	0.018 s	
gmultiply>calc_general_	1287	0.018 s	0.018 s	
<u>dn dzj</u>	732	0.018 s	0.018 s	
network.subsasgn>setLayerConnect	20	0.018 s	0.000 s	
pos_int_scalar	484	0.017 s	0.001 s	
<u>bz</u>	122	0.017 s	0.017 s	
gsqrt	488	0.017 s	0.017 s	
output_sizes_	236	0.017 s	0.017 s	
<u>validation</u>	112	0.017 s	0.017 s	
network.subsasgn>setBiasConnect	20	0.017 s	0.000 s	
<u>unique</u>	13	0.016 s	0.016 s	
real_0_to_1	222	0.016 s	0.016 s	
strict pos scalar	120	0.016 s	0.000 s	
first match	852	0.016 s	0.016 s	
net_input_fcn	40	0.016 s	0.016 s	
mean	1400	0.016 s	0.016 s	
<u>learngdm</u>	120	0.016 s	0.016 s	
normalize_error	799	0.016 s	0.016 s	
cell2mat	544	0.016 s	0.016 s	
pos int scalar>type check	484	0.016 s	0.016 s	
nntraintool	122	0.016 s	0.016 s	
etime	122	0.016 s	0.016 s	
network.subsasgn>setLayerWeightLearnFcn	20	0.016 s	0.000 s	
network.subsasgn>newBias	30	0.016 s	0.016 s	
minmax_	150	0.016 s	0.016 s	
			0.016 s	

network.subsasgn>setInitFcn	10	0.016 s	0.016 s
strict_pos_scalar>type_check_	120	0.016 s	0.016 s
nndata pos	10	0.016 s	0.015 s
setup1>checkPdImplemented	31	0.016 s	0.016 s
performance_fcn	51	0.015 s	0.015 s
create	40	0.015 s	0.015 s
da dn	366	0.015 s	0.015 s
formatNet	21	0.015 s	0.000 s
usejava	376	0.015 s	0.015 s
network.subsasgn>setOutputConnect	20	0.015 s	0.015 s
matrix_data>type_check_	231	0.015 s	0.015 s
<u>defaults</u>	31	0.015 s	0.015 s
nnMex	21	0.015 s	0.015 s
<u>codeHints</u>	21	0.015 s	0.015 s
convert1D	12	0.015 s	0.015 s
network.subsasgn>setNumLayers	20	0.003 s	0.000 s
delayed inputs	122	0.003 s	0.000 s
setup>share_samples	30	0.003 s	0.001 s
network.subsasgn>nextsubs	960	0.002 s	0.002 s
network.subsasgn>nsubsasn	650	0.002 s	0.002 s
network.subsasgn>newLayer	10	0.002 s	0.000 s
network.subsasgn>setBiasLearnFcn	30	0.002 s	0.001 s
initwb	180	0.002 s	0.000 s
layer order	83	0.002 s	0.002 s
nnMATLAB.	31	0.002 s	0.002 s
mat2cell	61	0.002 s	0.002 s
int2str	310	0.001 s	0.001 s
name	102	0.001 s	0.001 s
string>type_check	2126	0.001 s	0.001 s

bool scalar	240	0.001 s	0.001 s
pos_inf_scalar	120	0.001 s	0.001 s
strict pos int scalar	151	0.001 s	0.001 s
over1	120	0.001 s	0.001 s
net_input_fcn	10	0.001 s	0.000 s
repmat	20	0.001 s	0.000 s
repmat>@(x)double(full(x))	40	0.001 s	0.001 s
netsum	10	0.001 s	0.000 s
create	40	0.001 s	0.000 s
apply	40	0.001 s	0.001 s
dx_dy_	122	0.001 s	0.001 s
dz_dp	244	0.001 s	0.001 s
network.subsasgn>setInputWeightLearnFcn	10	0.001 s	0.001 s
network.subsasgn>setPlotFcns	10	0.001 s	0.001 s
initwb>initialize_bias_	30	0.001 s	0.001 s
initwb>configure layer weight	110	0.001 s	0.001 s
initlay>initialize bias	30	0.001 s	0.000 s
initlay>configure_layer_weight_	140	0.001 s	0.000 s
nndata pos>strict format	10	0.001 s	0.000 s
@network\private\nn configure bias	30	0.001 s	0.000 s
network.subsasgn>subs2	40	0.001 s	0.001 s
fix nan inputs	10	0.001 s	0.001 s
weedProcessSteps	31	0.001 s	0.001 s
layer_sizes	94	0.001 s	0.001 s
pc>fast_mat2cell	31	0.001 s	0.001 s
<u>convertNum</u>	1	0 s	0.000 s
cell.strmatch	1	0 s	0.000 s
strmatch_	1	0 s	0.000 s
unique>uniquelegacy_	13	0 s	0.000 s

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<u>intmin</u>	13	0 s	0.000 s
num2str>handleNumericPrecision_	226	0 s	0.000 s
num2str>convertUsingRecycledSprintf	226	0 s	0.000 s
feedback>train status str	210	0 s	0.000 s
<u>type</u>	51	0 s	0.000 s
normalize	144	0 s	0.000 s
string>strict format	30	0 s	0.000 s
network.subsasgn>setLayerName	30	0 s	0.000 s
filesep	524	0 s	0.000 s
error norm mode	102	0 s	0.000 s
cell_data	206	0 s	0.000 s
pos_int_vector	122	0 s	0.000 s
minargs_	3132	0 s	0.000 s
real 0 to 1>type check	222	0 s	0.000 s
error_norm_mode>type_check_	102	0 s	0.000 s
trainIm>formatNet_	10	0 s	0.000 s
pos scalar>type check	440	0 s	0.000 s
num_scalar>type_check_	240	0 s	0.000 s
<u>info</u>	40	0 s	0.000 s
parameterInfo	80	0 s	0.000 s
parameterInfo	60	0 s	0.000 s
parameterInfo	460	0 s	0.000 s
<u>parameterInfo</u>	40	0 s	0.000 s
parameterInfo	420	0 s	0.000 s
name.	40	0 s	0.000 s
<u>type</u>	40	0 s	0.000 s
name_	30	0 s	0.000 s
type	30	0 s	0.000 s
<u>outputRange</u>	30	0 s	0.000 s
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<u>activeInputRange</u>	30	0 s	0.000 s
<u>isScalar</u>	30	0 s	0.000 s
<u>outputRange</u>	210	0 s	0.000 s
<u>activeInputRange</u>	210	0 s	0.000 s
isScalar	210	0 s	0.000 s
name	230	0 s	0.000 s
type	230	0 s	0.000 s
inputDerivType_	230	0 s	0.000 s
<u>weightDerivType</u>	230	0 s	0.000 s
name	10	0 s	0.000 s
type	10	0 s	0.000 s
processing_fcn	70	0 s	0.000 s
processInputs	10	0 s	0.000 s
<u>processOutputs</u>	10	0 s	0.000 s
processInputs	20	0 s	0.000 s
processOutputs	20	0 s	0.000 s
processInputs	40	0 s	0.000 s
processOutputs	40	0 s	0.000 s
name	20	0 s	0.000 s
type	20	0 s	0.000 s
name	40	0 s	0.000 s
<u>type</u>	40	0 s	0.000 s
name	210	0 s	0.000 s
type	210	0 s	0.000 s
apply	576	0 s	0.000 s
nnetParam>nnetParam.nnetParam	10	0 s	0.000 s
network.subsasgn>setNumInputs	20	0 s	0.000 s
@network\private\isposint	60	0 s	0.000 s
@network\private\nn_new_input_struct	10	0 s	0.000 s

repmat>create@(x)double(full(x))	20	0 s	0.000 s
apply	20	0 s	0.000 s
apply	40	0 s	0.000 s
adaptwb	10	0 s	0.000 s
nnetParam>nnetParam.struct	120	0 s	0.000 s
nnfcnTraining>nnfcnTraining.gdefaults	10	0 s	0.000 s
dataHints	10	0 s	0.000 s
dataHints	21	0 s	0.000 s
formatData	21	0 s	0.000 s
pos int vector>type check	122	0 s	0.000 s
pos_int_scalar>strict_format	120	0 s	0.000 s
jac s>remove dont care errors	122	0 s	0.000 s
config	10	0 s	0.000 s
nnsize	21	0 s	0.000 s
nnsize	267	0 s	0.000 s
jac s>outputs2layersE	122	0 s	0.000 s
active fcns	122	0 s	0.000 s
dz_dw	366	0 s	0.000 s
validation start	10	0 s	0.000 s
getwb	41	0 s	0.000 s
formwb	41	0 s	0.000 s
getwb	20	0 s	0.000 s
nnCalcLib>nnCalcLib.getwb	20	0 s	0.000 s
start	10	0 s	0.000 s
status	60	0 s	0.000 s
deal	144	0 s	0.000 s
write	122	0 s	0.000 s
fileparts	122	0 s	0.000 s
check	31	0 s	0.000 s
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flags	132	0 s	0.000 s
thworks.toolbox.nnet.guis.nnTrainTool (Java method)	244	0 s	0.000 s
network.subsasgn>setTrainFcn	10	0 s	0.000 s
dividerand	20	0 s	0.000 s
dividerand>divide_indices	10	0 s	0.000 s
plotperform	10	0 s	0.000 s
plottrainstate	10	0 s	0.000 s
plotregression	10	0 s	0.000 s
network.subsasgn>setAdaptFcn	10	0 s	0.000 s
network.subsasgn>setDivideFcn	10	0 s	0.000 s
@network\private\isbool	40	0 s	0.000 s
initwb>configure_input_weight_	40	0 s	0.000 s
initlay>configure input weight	60	0 s	0.000 s
cell data>type check	206	0 s	0.000 s
nndata_pos>type_check_	10	0 s	0.000 s
data>strict_format	303	0 s	0.000 s
initnw>configure input weight	20	0 s	0.000 s
initnw>configure_layer_weight	30	0 s	0.000 s
rands	30	0 s	0.000 s
rands>new value from rows cols	30	0 s	0.000 s
linspace	30	0 s	0.000 s
network.subsasgn>newWeight	30	0 s	0.000 s
<u>size</u>	200	0 s	0.000 s
network.subsasgn>newOutput	10	0 s	0.000 s
network.subsasgn>subs1_	180	0 s	0.000 s
bool scalar>type check	240	0 s	0.000 s
strict pos int inf scalar>type check	120	0 s	0.000 s
pos_inf_scalar>type_check_	120	0 s	0.000 s
strict pos int scalar>type check	151	0 s	0.000 s

checkOptions	31	0 s	0.000 s
over1>type_check	120	0 s	0.000 s
network.network>setnet	60	0 s	0.000 s
meshgrid	40	0 s	0.000 s
net	10	0 s	0.000 s
<u>extractNameValuePairs</u>	31	0 s	0.000 s
<u>override</u>	31	0 s	0.000 s
expandFile	31	0 s	0.000 s
nn7	10	0 s	0.000 s
argPairs2Struct	62	0 s	0.000 s
netCheck	20	0 s	0.000 s
netFcns_	42	0 s	0.000 s
¥	21	0 s	0.000 s
nnetTrainingRecord	10	0 s	0.000 s
pruneEmptyWeights_	31	0 s	0.000 s
<u>starts</u>	51	0 s	0.000 s
input sizes	52	0 s	0.000 s
flipIr	61	0 s	0.000 s
flip	20	0 s	0.000 s
netHints>simlayorder	10	0 s	0.000 s
defaultderiv	10	0 s	0.000 s
forward layer delays	21	0 s	0.000 s
forward layer delays>delays to layer	63	0 s	0.000 s
formatNet	10	0 s	0.000 s
formatData	10	0 s	0.000 s
codeHints	10	0 s	0.000 s
nnCalcLib>nnCalcLib.nnCalcLib	31	0 s	0.000 s
summary	10	0 s	0.000 s
<u>summary</u>	21	0 s	0.000 s

<u>finalize</u>	10	0 s	0.000 s
уу (MEX-file)	21	0 s	0.000 s
nnCalcLib>nnCalcLib.y	21	0 s	0.000 s
network.sim>simPerWorker	21	0 s	0.000 s
network.sim>getXf	10	0 s	0.000 s
<u>parseArgs</u>	12	0 s	0.000 s
<u>parseArgs</u>	12	0 s	0.000 s
trace	12	0 s	0.000 s

 $\textbf{Self time} \ \ \text{is the time spent in a function excluding the time spent in its child full self time also includes overhead resulting from the process of profiling. }$

unctions