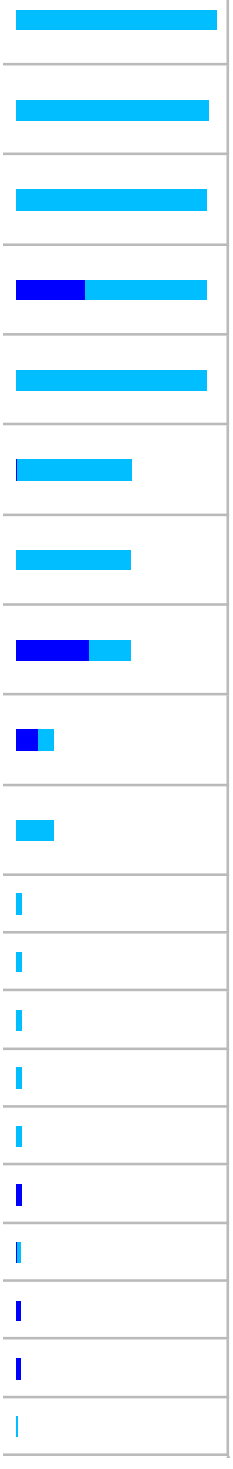
Profile Summary

Generated 24-Feb-2015 11:12:02 using cpu time.

Function Name	Calls	**Total Time**	Self Time*
ANNkfoldver3b	1	66.495 s	0.016 s
network.train	10	63.950 s	0.016 s
trainlm	210	63.236 s	0.000 s
trainlm>train_network	10	63.236 s	23.444 s
network.train>trainPerWorker	10	63.236 s	0.000 s
nnCalcLib>nnCalcLib.perfsJEJJ	159	38.525 s	0.560 s
perfsJEJJ	159	37.965 s	0.000 s
perfsJEJJ>calc_Y_trainPerfJeJJ	159	37.777 s	24.728 s
jac_s	159	12.676 s	7.434 s
perfsJEJJ>calc_jacobian	159	12.676 s	0.000 s
newff>new_5p1	10	1.954 s	0.016 s
newff>create_network	10	1.954 s	0.000 s
newff	10	1.954 s	0.000 s
network.subsasgn>network_subsasgn	640	1.934 s	0.031 s
network.subsasgn	640	1.919 s	0.000 s
dperf	159	1.861 s	1.815 s
nnModuleInfo	971	1.515 s	0.891 s
jac_s>reprowint	795	1.496 s	1.496 s
jac_s>reprow	795	1.468 s	1.468 s
nnCalcLib>nnCalcLib.trainPerf	278	0.844 s	0.079 s

Total Time Plot (dark band = self time)


perfs	278	0.765 s	0.047 s
trainPerf	278	0.765 s	0.000 s
y	278	0.702 s	0.046 s
setup1>setupImpl	31	0.607 s	0.016 s
setup1	31	0.607 s	0.000 s
@network\private\nn_configure_layer	150	0.597 s	0.016 s
y>calca	278	0.481 s	0.263 s
@ne...\private\nn_configure_layer_weight	280	0.425 s	0.016 s
transfer_fcn	350	0.406 s	0.000 s
setup	10	0.406 s	0.000 s
network.subsasgn>setLayerTransferFcn	50	0.404 s	0.032 s
network.sim	21	0.387 s	0.000 s
tansig	300	0.373 s	0.015 s
netHints	10	0.326 s	0.031 s
network.subsasgn>getDefaultParam	240	0.311 s	0.000 s
y_all	159	0.311 s	0.077 s
jac_s>stretch	159	0.277 s	0.277 s
apply	2185	0.266 s	0.266 s
perfsJEJJ>calc_perf_N	477	0.250 s	0.079 s
network.sim>nncalc_setup	21	0.247 s	0.000 s
performance_fcn	41	0.231 s	0.000 s
mse	41	0.231 s	0.000 s
...ParamInfo>nnetParamInfo.nnetParamInfo	524	0.218 s	0.077 s
parameter_defaults	1071	0.215 s	0.061 s
initlay	400	0.202 s	-0.000 s
info	51	0.201 s	0.015 s
feedback	169	0.187 s	0.094 s
info	390	0.174 s	0.127 s
@network\private\nn_configure_output	30	0.174 s	0.000 s

network.subsasgn>setLayerInitFcn	50	0.174 s	0.000 s
parameterInfo	102	0.171 s	0.016 s
@network\private\nn_update_read_only	640	0.170 s	0.170 s
network.init	10	0.156 s	0.000 s
initnw>initialize_layer	50	0.156 s	0.000 s
initnw	120	0.156 s	0.000 s
initlay>initialize_network	10	0.156 s	0.000 s
@network\private\nn_configure_input	20	0.155 s	0.000 s
nnCalcLib>nnCalcLib.setwb	278	0.143 s	0.032 s
network.subsasgn>setInputProcessFcns	10	0.143 s	0.000 s
netHints	31	0.142 s	0.110 s
process_fcn	50	0.142 s	0.000 s
param>do_test	120	0.140 s	0.108 s
gmultiply	1709	0.140 s	0.031 s
network.subsasgn>setTrainParam	120	0.140 s	0.000 s
param	120	0.140 s	0.000 s
reverse	596	0.125 s	0.125 s
network.subsasgn>setInputExampleInput	10	0.123 s	0.000 s
removeconstantrows	60	0.111 s	-0.000 s
setwb	278	0.111 s	0.016 s
y>post_outputs	278	0.111 s	0.015 s
mapminmax	60	0.110 s	-0.000 s
network.subsasgn>setLayerSize	40	0.109 s	0.000 s
gmultiply>calc_cell	1709	0.109 s	0.030 s
network.subsasgn>setLayerDimensions	40	0.109 s	0.015 s
fixunknowns	30	0.107 s	0.000 s
create	20	0.107 s	0.016 s
y>reverse_process	278	0.096 s	0.016 s

network.subsasgn>setOutputExampleOutput	10	0.096 s	0.000 s
setwb	288	0.095 s	0.000 s
separatewb	288	0.095 s	0.095 s
network.subsasgn>setOutputProcessFcns	10	0.094 s	-0.000 s
mean	1400	0.091 s	0.091 s
info	70	0.079 s	0.016 s
gmultiply>calc_general	1709	0.079 s	0.079 s
data	467	0.078 s	0.046 s
network.network	670	0.078 s	0.015 s
@ne...\private\nn_configure_input_weight	60	0.078 s	-0.000 s
info	400	0.077 s	0.062 s
network.subsasgn>setPerformFcn	10	0.076 s	0.000 s
pd	278	0.064 s	0.064 s
parameterInfo	120	0.063 s	0.016 s
weight_fcn	60	0.063 s	0.000 s
network.network>new_network	10	0.063 s	0.000 s
setup>setupPerWorker	10	0.063 s	0.000 s
setup	10	0.063 s	0.000 s
dotprod	60	0.063 s	0.000 s
options2Mode	31	0.063 s	0.032 s
netHints	21	0.062 s	0.047 s
network.subsasgn>matchstring	980	0.062 s	0.062 s
tapdelay	318	0.062 s	0.062 s
apply	2185	0.061 s	0.061 s
num2str	669	0.048 s	0.000 s
purelin	50	0.048 s	0.000 s
apply	2185	0.048 s	0.048 s
string	2146	0.047 s	0.015 s

real_0_to_1	222	0.047 s	0.047 s
getParamStructFromArgs	100	0.047 s	0.000 s
dn_dzj	1590	0.047 s	0.047 s
wb_indices	145	0.047 s	0.047 s
network.subsasgn>setLayerConnect	20	0.047 s	0.015 s
minmax	170	0.047 s	0.016 s
transfer_fcn	400	0.046 s	0.046 s
network.subsasgn>nextsubs	1320	0.046 s	0.046 s
y_all>calc_pd	159	0.046 s	0.000 s
netCheck	42	0.046 s	0.015 s
setup2	31	0.046 s	0.000 s
grp2idx	13	0.032 s	0.032 s
int2str	379	0.032 s	0.032 s
feedback>train_status_str	258	0.032 s	0.000 s
string>type_check	2146	0.032 s	0.032 s
nnetParamInfo>fcn2filename	524	0.032 s	0.016 s
pos_int_scalar	558	0.032 s	0.032 s
first_match	1092	0.032 s	0.032 s
network.subsasgn>setNumLayers	20	0.032 s	0.016 s
network.sim>simDataCellOfMatrix	21	0.032 s	0.000 s
da_dn	795	0.032 s	0.032 s
validation	149	0.032 s	0.032 s
network.subsasgn>setPlotFcns	10	0.032 s	0.016 s
data>type_check	467	0.032 s	0.016 s
setup>share_samples	30	0.032 s	0.016 s
network.sim>simData	21	0.032 s	0.000 s
crossvalind	1	0.031 s	0.015 s
confusionmat	12	0.031 s	0.015 s
network.subsasgn>nsubsasn	770	0.031 s	0.031 s

formatNet	21	0.031 s	0.000 s
confusionmatStats_	12	0.031 s	0.000 s
match	1468	0.031 s	0.031 s
update	159	0.031 s	0.031 s
defaultMode	62	0.031 s	0.000 s
network.subsasgn>setInputConnect_	20	0.031 s	0.000 s
initwb	320	0.031 s	0.015 s
initlay>configure_layer_weight_	280	0.031 s	0.000 s
initnw>calcnw_	50	0.031 s	0.000 s
options2Mode>MexOrMATLAB_	31	0.031 s	0.000 s
nnCalcLib>nnCalcLib.y_	21	0.031 s	0.016 s
network.sim>simPerWorker_	21	0.031 s	0.000 s
convert1D	12	0.031 s	0.031 s
nntraintool_	159	0.030 s	0.030 s
write	159	0.030 s	0.000 s
pc	31	0.030 s	0.015 s
preCalcData	31	0.030 s	0.000 s
num2str>handleNumericPrecision_	273	0.016 s	0.000 s
num2str>convertUsingRecycledSprintf_	273	0.016 s	0.016 s
filesep	524	0.016 s	0.016 s
matrix_data_	271	0.016 s	0.016 s
pos_scalar_	440	0.016 s	0.016 s
parameterInfo	80	0.016 s	0.000 s
parameterInfo	780	0.016 s	0.016 s
weight_fcn	390	0.016 s	0.016 s
inputDerivType	390	0.016 s	0.016 s
name_	350	0.016 s	0.016 s
create	40	0.016 s	0.016 s
create	40	0.016 s	0.000 s

apply	40	0.016 s	0.016 s
learngdm	200	0.016 s	0.016 s
bz	159	0.016 s	0.016 s
delayed_inputs	159	0.016 s	0.000 s
gsubtract>calc_cell	914	0.016 s	0.000 s
gsubtract>calc_general	914	0.016 s	0.016 s
gsubtract	924	0.016 s	0.000 s
normalize_error	1073	0.016 s	0.016 s
nndata	159	0.016 s	0.000 s
nnsize	304	0.016 s	0.016 s
dx_dy	159	0.016 s	0.016 s
dz_dp	636	0.016 s	0.016 s
deal	181	0.016 s	0.016 s
plotregression	10	0.016 s	0.016 s
network.subsasgn>newLayer	10	0.016 s	0.000 s
network.subsasgn>setInputWeightLearnFcn	10	0.016 s	0.000 s
initwb>configure_layer_weight	230	0.016 s	0.016 s
normr	50	0.016 s	0.000 s
randnr>new_value_from_rows_cols	50	0.016 s	0.000 s
randnr	50	0.016 s	0.000 s
network.network>setnet	60	0.016 s	0.000 s
meshgrid	40	0.016 s	0.016 s
layer_order	83	0.016 s	0.016 s
nndata_pos	10	0.016 s	0.016 s
weedProcessSteps	31	0.016 s	0.016 s
normalize	144	0.015 s	0.015 s
num_scalar	240	0.015 s	0.015 s
net_input_fcn	60	0.015 s	0.015 s
apply	776	0.015 s	0.015 s

cell2mat	973	0.015 s	0.015 s
usejava	487	0.015 s	0.015 s
fileparts	159	0.015 s	0.015 s
flags	169	0.015 s	0.015 s
dividerand	20	0.015 s	0.015 s
network.subsasgn>setDivideFcn	10	0.015 s	0.015 s
network.subsasgn>setOutputConnect	20	0.015 s	0.000 s
initlay>configure_input_weight	60	0.015 s	0.015 s
linspace	50	0.015 s	0.015 s
nnMATLAB	31	0.015 s	0.015 s
y	21	0.015 s	0.000 s
pc>fast_mat2cell	31	0.015 s	0.015 s
forward_layer_delays	21	0.015 s	0.000 s
forward_layer_delays>delays_to_layer	105	0.015 s	0.015 s
codeHints	21	0.015 s	0.015 s
yy (MEX-file)	21	0.015 s	0.015 s
convertNum	1	0 s	0.000 s
cell.strmatch	1	0 s	0.000 s
strmatch	1	0 s	0.000 s
unique	13	0 s	0.000 s
unique>uniquelegacy	13	0 s	0.000 s
intmax	26	0 s	0.000 s
intmin	13	0 s	0.000 s
name	102	0 s	0.000 s
type	51	0 s	0.000 s
performance_fcn	51	0 s	0.000 s
string>strict_format	50	0 s	0.000 s
network.subsasgn>setLayerName	50	0 s	0.000 s
error_norm_mode	102	0 s	0.000 s

bool_scalar	240	0 s	0.000 s
strict_pos_int_inf_scalar	120	0 s	0.000 s
pos_inf_scalar	120	0 s	0.000 s
strict_pos_int_scalar	151	0 s	0.000 s
over1	120	0 s	0.000 s
strict_pos_scalar	120	0 s	0.000 s
cell_data	206	0 s	0.000 s
pos_int_vector	159	0 s	0.000 s
minargs	3283	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
trainlm>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
info	60	0 s	0.000 s
parameterInfo	120	0 s	0.000 s
parameterInfo	100	0 s	0.000 s
parameterInfo	40	0 s	0.000 s
parameterInfo	700	0 s	0.000 s
name	60	0 s	0.000 s
type	60	0 s	0.000 s
name	50	0 s	0.000 s
type	50	0 s	0.000 s
outputRange	50	0 s	0.000 s
activeInputRange	50	0 s	0.000 s
isScalar	50	0 s	0.000 s
outputRange	350	0 s	0.000 s
activeInputRange	350	0 s	0.000 s
isScalar	350	0 s	0.000 s

name	390	0 s	0.000 s
type	390	0 s	0.000 s
weightDerivType	390	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
processOutputs	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
type	40	0 s	0.000 s
type	350	0 s	0.000 s
net_input_fcn	10	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	80	0 s	0.000 s
@network\private\nn_new_input_struct	10	0 s	0.000 s
repmat	20	0 s	0.000 s
repmat>create@(x)double(full(x))	20	0 s	0.000 s
repmat>@(x)double(full(x))	40	0 s	0.000 s
netsum	10	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	160	0 s	0.000 s
nnfcnTraining>nnfcnTraining.gdefaults	10	0 s	0.000 s
gsqrt	636	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
output_sizes	273	0 s	0.000 s
pos_int_vector>type_check	159	0 s	0.000 s
pos_int_scalar>type_check	558	0 s	0.000 s
pos_int_scalar>strict_format	120	0 s	0.000 s
jac_s>remove_dont_care_errors	159	0 s	0.000 s
config	10	0 s	0.000 s
nnsize	21	0 s	0.000 s
jac_s>outputs2layersE	159	0 s	0.000 s
jac_s>repcolint	159	0 s	0.000 s
active_fcns	159	0 s	0.000 s
dz_dw	795	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
check	31	0 s	0.000 s
etime	159	0 s	0.000 s
...thworks.toolbox.nnet.guis.nnTrainTool (Java method)	318	0 s	0.000 s
y>active_fcns	278	0 s	0.000 s
network.subsasgn>setTrainFcn	10	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
network.subsasgn>setAdaptFcn	10	0 s	0.000 s
network.subsasgn>setBiasLearnFcn	50	0 s	0.000 s
network.subsasgn>setLayerWeightLearnFcn	40	0 s	0.000 s
network.subsasgn>setBiasConnect	20	0 s	0.000 s
@network\private\isbool	40	0 s	0.000 s
network.subsasgn>newBias	50	0 s	0.000 s
initwb>initialize_bias	50	0 s	0.000 s
initwb>configure_input_weight	40	0 s	0.000 s
initlay>initialize_bias	50	0 s	0.000 s
matrix_data>type_check	271	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	343	0 s	0.000 s
nndata_pos>strict_format	10	0 s	0.000 s
minmax	170	0 s	0.000 s
initnw>configure_input_weight	20	0 s	0.000 s
initnw>configure_layer_weight	50	0 s	0.000 s
rands	50	0 s	0.000 s
rands>new_value_from_rows_cols	50	0 s	0.000 s
@network\private\nn_configure_bias	50	0 s	0.000 s
network.subsasgn>newWeight	50	0 s	0.000 s
extract_param	60	0 s	0.000 s
size	340	0 s	0.000 s
network.subsasgn>newOutput	10	0 s	0.000 s
network.subsasgn>subs1	280	0 s	0.000 s
network.subsasgn>subs2	60	0 s	0.000 s

network.subsasgn>setInitFcn	10	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
strict_pos_scalar>type_check	120	0 s	0.000 s
net	10	0 s	0.000 s
extractNameValuePairs	31	0 s	0.000 s
defaults	31	0 s	0.000 s
override	31	0 s	0.000 s
expandFile	31	0 s	0.000 s
nn7	10	0 s	0.000 s
nnMex	21	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
fix_nan_inputs	10	0 s	0.000 s
mat2cell	61	0 s	0.000 s
nnetTrainingRecord	10	0 s	0.000 s
pruneEmptyWeights	31	0 s	0.000 s
setup1>checkPdImplemented	31	0 s	0.000 s
starts	51	0 s	0.000 s
input_sizes	52	0 s	0.000 s
fliplr	61	0 s	0.000 s
flip	20	0 s	0.000 s
layer_sizes	94	0 s	0.000 s
netHints>simlayorder	10	0 s	0.000 s

defaultderiv	10	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
summary	21	0 s	0.000 s
finalize	10	0 s	0.000 s
network.sim>getXf	10	0 s	0.000 s
parseArgs	12	0 s	0.000 s
parseArgs	12	0 s	0.000 s
trace	12	0 s	0.000 s

Self time is the time spent in a function excluding the time spent in its child f
Self time also includes overhead resulting from the process of profiling.

functions