CSG2341

Workshop 5: Cross validation testing of a neural network for regression

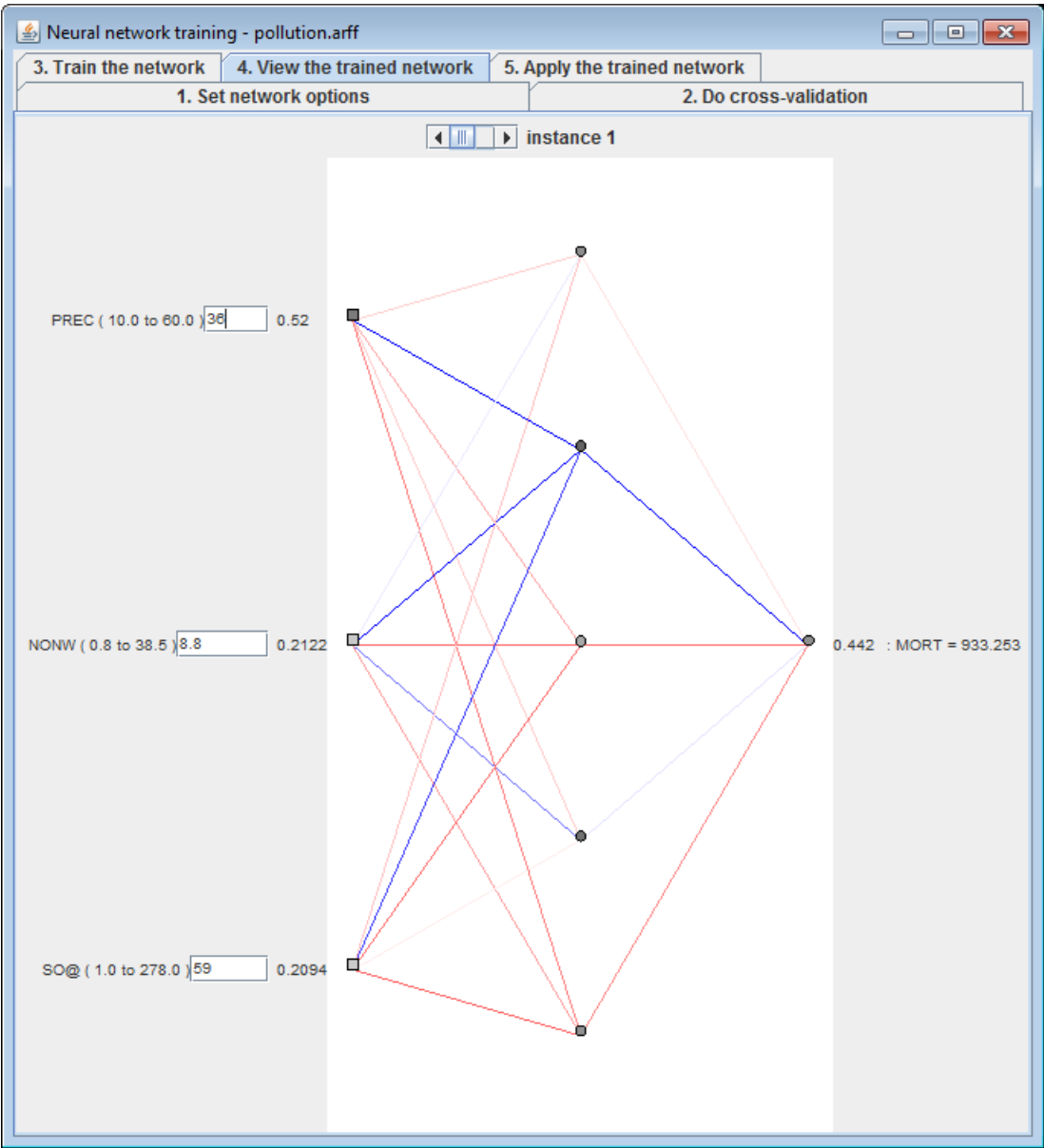Martin Ponce 10371381

Attribute defintions

- PREC Average annual precipitation in inches
- JANT Average January temperature in degrees F
- JULT Same for July
- OVR65 % of 1960 SMSA population aged 65 or older
- POPN Average household size
- EDUC Median school years completed by those over 22
- EDUC Median school years completed by those over 22
- HOUS % of housing units which are sound & with all facilities
- DENS Population per sq. mile in urbanized areas, 1960
- NONW % non-white population in urbanized areas, 1960
- WWDRK % employed in white collar occupations
- POOR % of families with income < $3000
- HC Relative hydrocarbon pollution potential
- NOX Same for nitric oxides
- SO@ Same for sulphur dioxide
- HUMID Annual average % relative humidity at 1pm
- MORT Total age-adjusted mortality rate per 100,000

Target

- Least amount of attributes
- Converted test error score < 41.0

Results

Attributes

- PREC
- NONW
- SO@

Errors

results	train error	test error
mean	0.013	0.016
converted	37.388	40.428