Appendix (A)

A.1. Definition of PNN Tab Options

The PNN tab in VariReg software shown in Figure (A-1), all options which can be used are defined below:

1. (Maximal) degree of polynomials in each neuron.
2. Algorithms using in polynomial neural network
3. Error criteria
4. whether the inputs to the neurons are taken only from the preceding layer or also from the original input variables
5. Maximum number of inputs in each neuron.
6. Maximum number of neurons in each layer
7. Draw surface of the model right after building it.
8. Save the results in notepad file
9. Information and evaluation of the build model

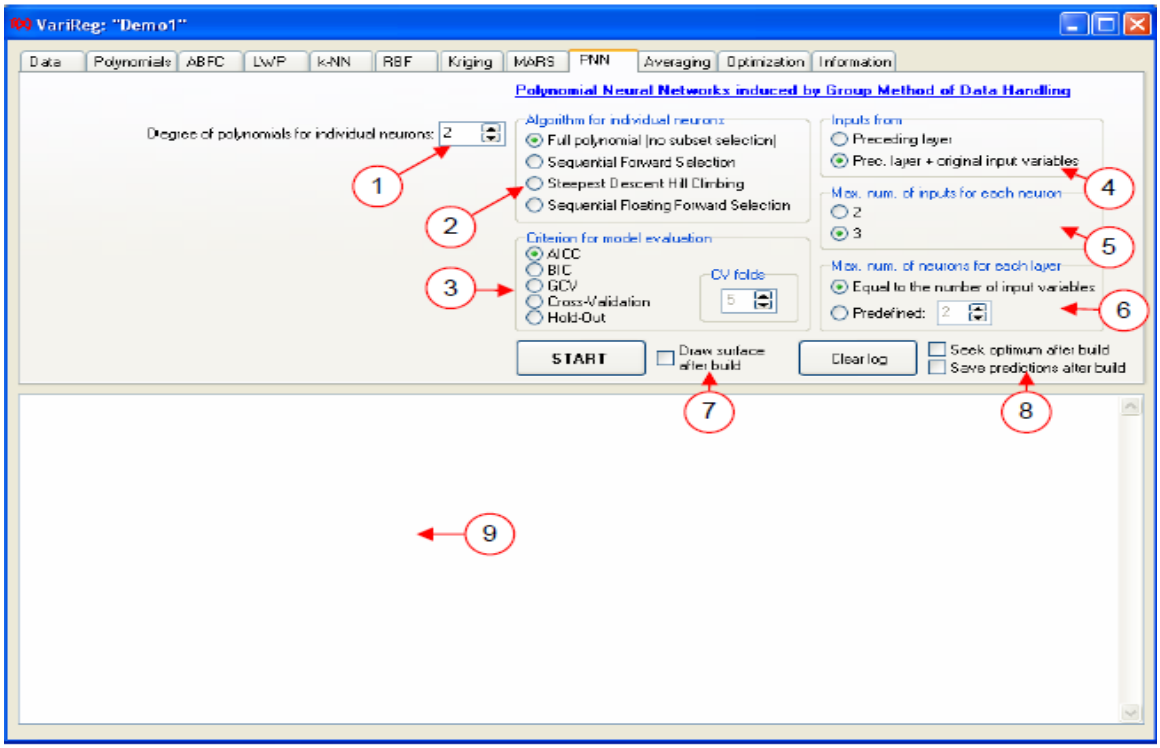

Figure A-1: Definition of PNN Tab Options

The tempalte file (notepad file) for loading data of training and testing datasets are show in Figure(A-2) and Figure (A-3) respectively.

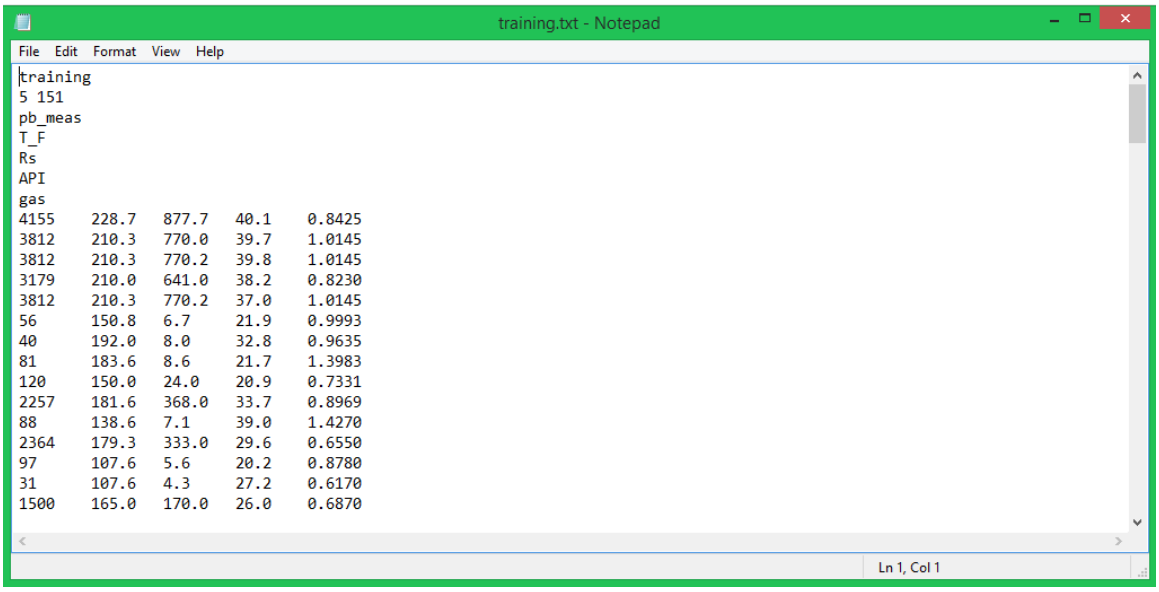

Figure A-2: Notepad file for entering training data, an example from this study

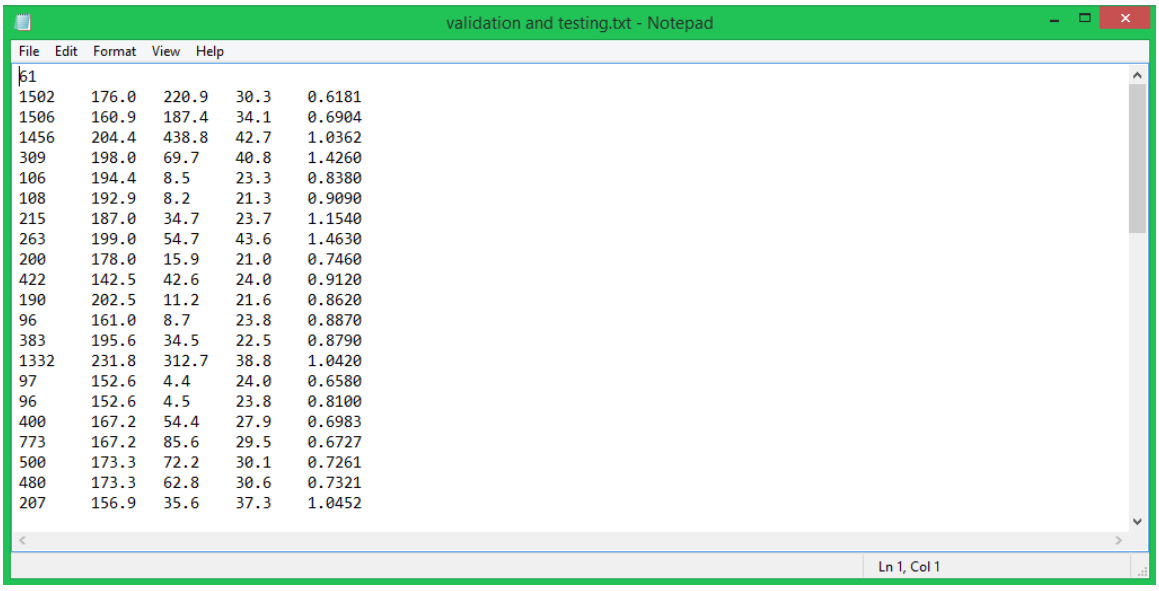

Figure A-3 Notepad file for entering testing data, an example from this study