## SYDE422 Machine Intelligence Assignment #1 Winter 2007

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**Deadline**: January 30, 2007

## **Non-Linear Regression**

Following data is given:

Independent variable  $x = [1 \ 12 \ 32 \ 40 \ 55]$ Desired output  $r = [-0.96 \ 0.93 \ 0.99 \ 0.18 \ 0.94]$ 

Use non-linear regression to approximate the function f(x) such that

 $r = f(x) + \varepsilon$ .

Use the following validation data to verify the accuracy of your regression:

Describe your experience with bias/variance dilemma.