

Nonlinear Least-Squares Fitting

1. Load: Nonlinear LS.xlsm from BlackBoard (file originally from jkp-ads.com/articles/least-squares.asp).
2. Load Add-In option: use **File** tab, click on **Options**, click on **Add-Ins**, highlight **Solver Add-in**, ensure **Excel Add-ins** is selected in **Manage**, click **Go**, ensure that **Solver Add-in** is checked, then click **OK**.
3. Cut and paste data into x and y columns.
4. Write Excel function into cell C2 (first yhat value), then copy and paste function to entire column.
5. Put initial guesses into Cells G2 to G3 (or more if there are more parameters to the function).
6. Click on **Data** tab, then choose **Solver** from **Analysis**.
7. Ensure that correct range is in "**By Changing Variable Cells**", e.g. **\$G\$2:\$G\$3** for two parameters (**Set Objective** should remain **\$G\$11** to minimize standard deviation).
8. Press **Solve**.
9. Click **OK** with **Solver Solution** checked.
10. Optimal values should now be in column G.

Screen Shot with alternate Explanation on right.

