How to plot a graph for publication in a paper

Very often you will use graphs to show numerical or experimental results. It is very important that you know how to plot a graph suitable in quality of a paper. Figure 1 shows an example graph taken from a publication from one of my past PhD students.

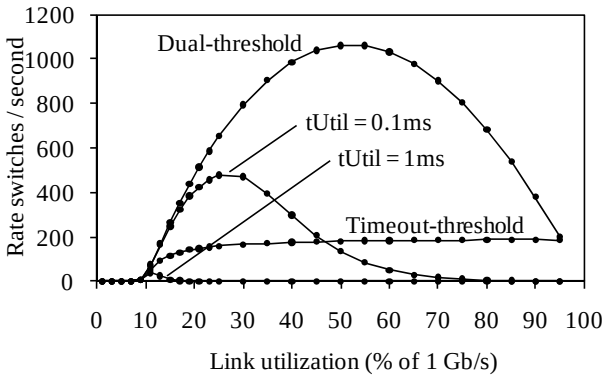

Figure 1. Oscillation analysis for dual threshold policy

Note the following:

1) The graph has a short descriptive caption
2) The X and Y axes are labeled (and measurement units are clearly stated)
3) There is a "dot" for each plotted value or measurement in each trace
4) The traces are clearly labeled
5) The graph uses no color – papers are generally published in black-and-white
6) The graph background is white
7) Never use line smoothing
8) For experimental data (including simulation data) it may be appropriate to show confidence interval "I beams"

Also consider:

1) If showing multiple graphs of comparative results, all graphs should have the same X and Y scales (i.e., minimum and maximum values) to enable easy visual comparison of results.
2) All graphs in a given paper should be the same size and format (consistency matters).
3) Read the format guidelines for the conference or journal you are submitting your work to. FOLLOW THE GUIDELINES. Failure to follow the guidelines (including page limits) will usually result in your work being rejected without even being reviewed!