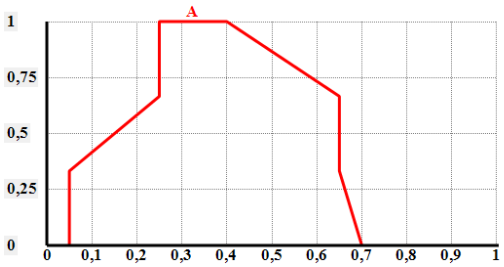
What is new in the FuzzME 2.2

Improved graphics

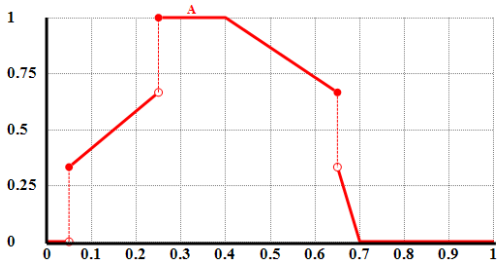
The images produced by the FuzzME have been improved significantly. The users also have more settings to create the image right according to their needs.

A new engine for drawing of the fuzzy numbers

The engine for drawing the fuzzy number has been revamped completely. Now the images created in the FuzzME are more appealing and suitable for professional scientific papers. The difference is apparent most on the fuzzy numbers with discontinuous membership functions.



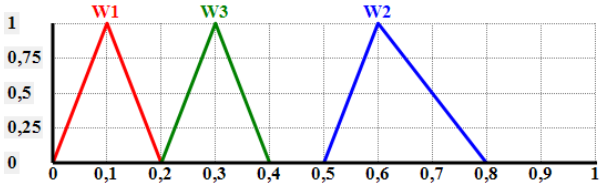
Old version



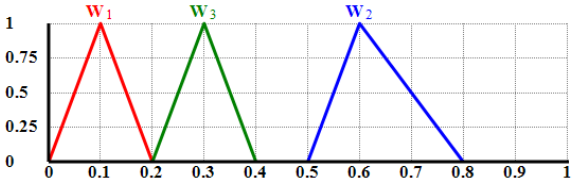
New version

The titles can contain lower and upper indices

The fuzzy numbers titles in your images can contain indices. They are written in the standard TeX notation ("_" for a lower index and "^" for an upper index). This way, the users can create figures for their papers so that the notation used in the papers matches perfectly with the one in the figures.



Old version



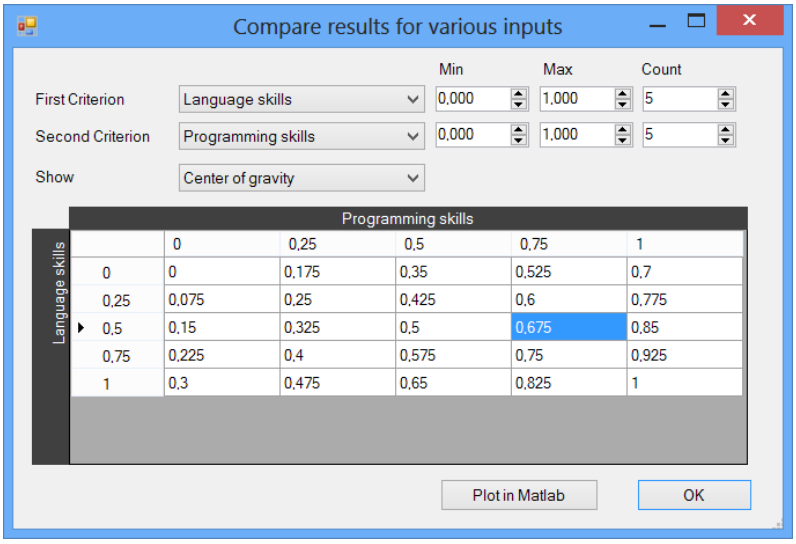
New version

Evaluation function analysis

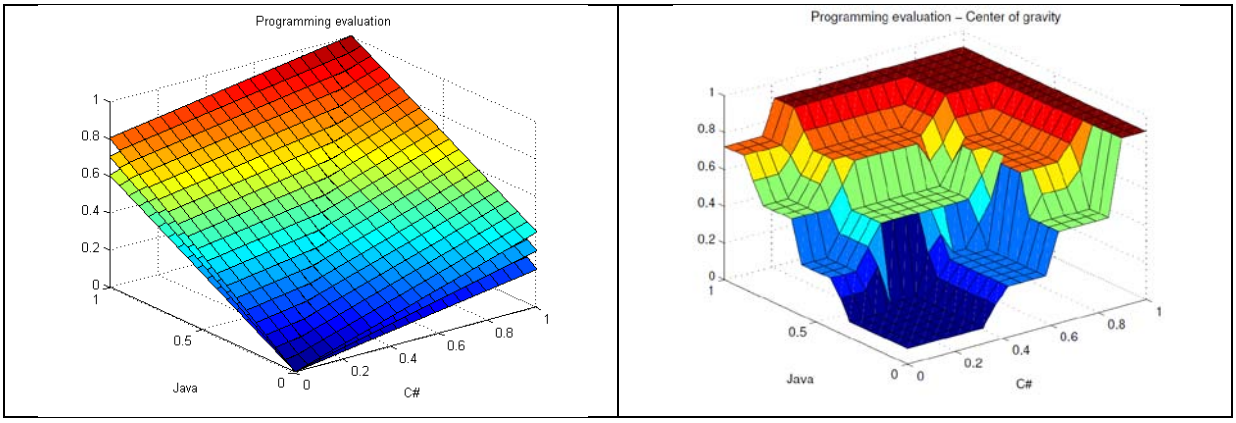
The evaluation function can be analyzed easily. In the new version, its graph can be also plotted. The function is available in the main menu by selecting Node | Compare result for various inputs. The user can select up to two criteria. The FuzzME will analyze then how the resulting evaluation is affected by the change of those two criteria. Several characteristics for the resulting evaluation can be calculated:

- Center of gravity;
- Uncertainty amount
- Kernel - its lowest value, its center or its highest value
- Support - its lowest value, its center or its highest value
- All significant points

The FuzzME can draw the graph of this characteristic in the Matlab (the M-file is generated). The great advantage is, that when the *All significant points* option is selected, all four significant points are plotted in one graph. This way, the users can see the maximum information about the resulting evaluation. They can see not only how the alternatives would perform when the values of the selected two criteria would change from their worst to their best value, they can observe also the changes in the uncertainty of the resulting evaluation.



The figure shows the analysis in the FuzzME - how the different evaluations of a programmer's language skills and programming skills would influence the overall evaluation?



Examples of evaluating functions visualization - comparison of different aggregation operators (the FuzzME uses the Matlab to generate the graphs)