

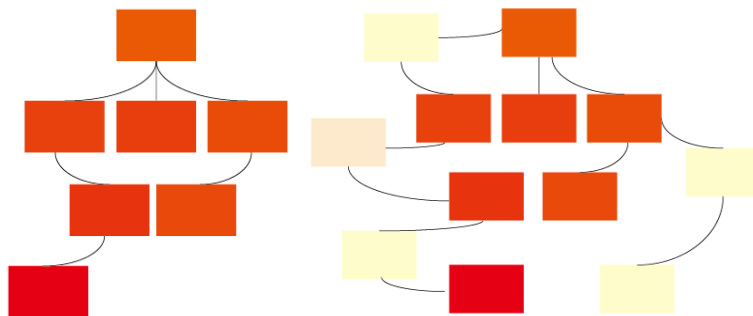
# Novel visualization proposal

**Method:** uncertainly visualization

**User input:** interesting significance level (different from cut off significance level)

**Result:**

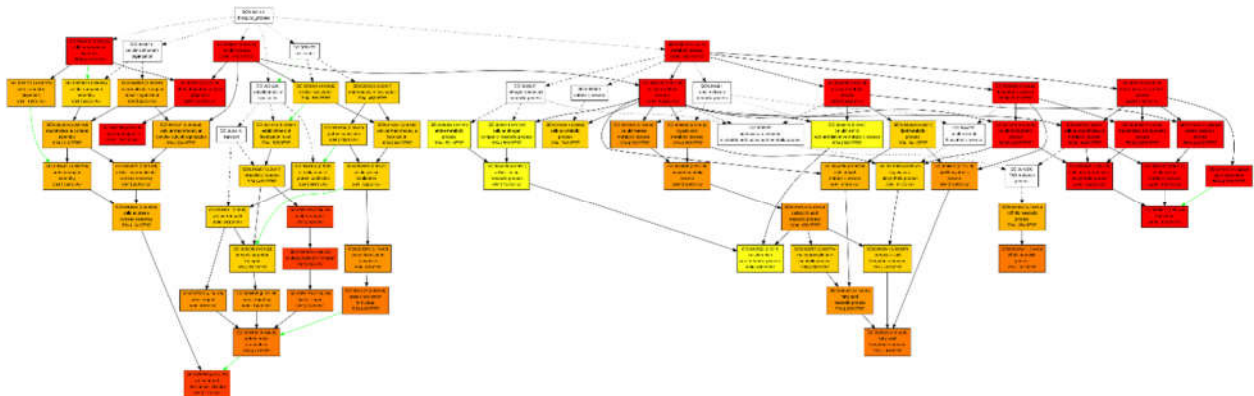
- Use continuous interpolated color to draw each box.
- Relocate the terms under the **interesting significance level** to the center.
- (option 1) Cut-off the uninteresting terms, generate a new relation called **descendant** to connect the terms.
- (option 2) Set the uninteresting terms to the outer range of the canvas, and set their color to transparent ones.
- When increasing the interesting significance level, more and more terms will start to appear and the layout of the graph is updated in real-time.
- When decrease the interesting significance level, less and less terms will start to appear and they will be centered to the canvas.



(left) option 1 imaginary result (right) option 2 imaginary result

**Purpose:**

The users could pay more attention to the interesting terms without influence from others.



result from AgriGO and Gorilla

**For example:**

above figure is a result from AgriGO, suppose the user input an interesting significance level which will cut off all boxes that are not red. Then our system will

- place all red terms in the center of the screen.
- (option 1) cut off all other color boxes and connect red boxes by using a new relationship called descendant.
- (option 2) change other boxes to more transparent colors and put them on the outer range and make them surround the red boxes.