$$p_G^* = \frac{\sum_{i=1}^{N_{p_G}} p_{G_i} \mu_{P_{G_{res}}}(p_{Gi})}{\sum_{i=1}^{N_{p_G}} \mu_{P_{G_{res}}}(p_{Gi})},$$

where summation is performed on discrete values p_{Gi} output area divided by N_{p_G} points.

According to the method of the center of sums, the membership function of the output is built by summing (aggregation by the sum, not combining by the maximum) of the outputs of each of the rules that worked:

$$p_G^* = \frac{\sum_{i=1}^{N_{p_G}} p_{G_i} \sum_{k=1}^{n} \mu_{0,k}(p_{Gi})}{\sum_{i=1}^{N_{p_G}} \sum_{k=1}^{n} \mu_{0,k}(p_{Gi})}.$$

In the method of defasification it is necessary to take a clear maximum value of the degree of membership of the function $\mu_{P_{res}}(p_G)$. If there are several elements of the definition area with the maximum value of the degree of affiliation, the average value of the maximum is selected:

$$p_G^* = \sum_{m=1}^{M} \frac{p_{Gm}}{M}.$$

The study implemented a fuzzy Mamdani result using the Java language for the problem of constructing the dependence of the parameters of the weight model: $m_{Wi} - p_{Wi}$ from the parameters of the geometric model: $m_{Gi} - p_{Gi}$ and strength model parameters: $m_{Si} - p_{Si}$ CTO component, which reduces the time of creation of CTO by managing the parameters of CTO model.

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