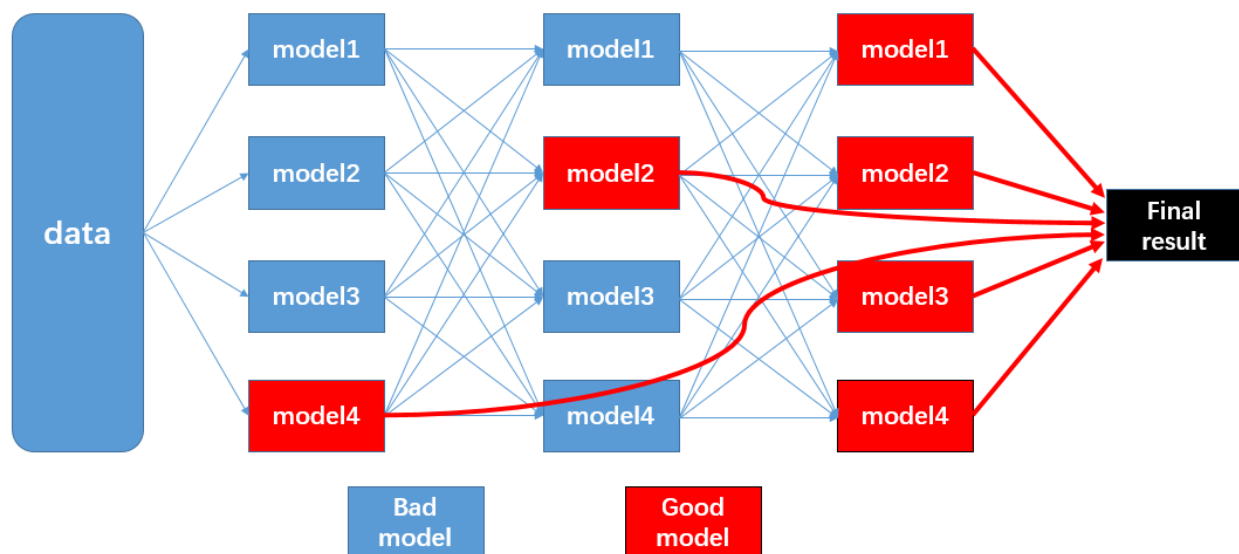


retrieveStack

- What is retrieveStack?

retrieveStack is an analytical framework by resembling a feedforward neural network and using stacked generalization in multiple levels to improve accuracy in classification (or regression) problems.

In contrast to conventional feedforward neural-network-like stacked structures, **retrieveStack** gathers the information of models in all layers, choose good models from multiple layers by comparing to output layer, and combine them with output layer model to optimize final prediction. Below is the pictorial description of how retrieveStack working:



The software is made available under MIT license.

- What is the advantage?

As a meta modelling methodology, the intuition behind **retrieveStack** is from the fact that the models in output layer might not be the best models, and there are some models in the previous layers have better performance. Combining these models in previous layer into the final prediction will potentially improve the final prediction.

retrieveStack gives **better prediction than the best single model contains in first layer**. Please note its performance relies on a mix of strong and diverse single models in order to get the best out of this analytical framework

- More complex framework

The flexibility of retrieveStack can also realize more complex metal modeling framework