Weakly supervised learning

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Weakly Supervised

Weakly supervised learning" refers to a variety of learning processes that aims to construct predictive models without much supervision. It consists of a method for instilling domain knowledge, as well as functions that mark data based on newly created training data.

Why?

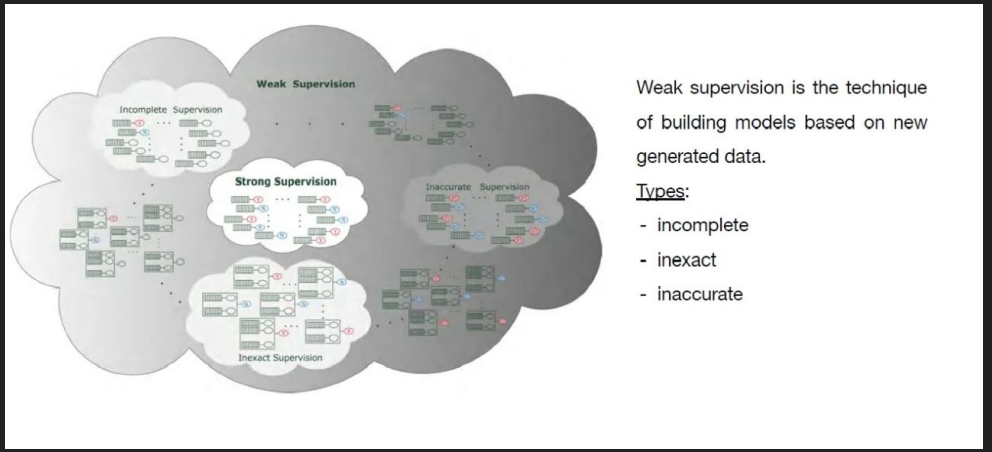
Weak supervision is more effective and scalable than other methods for addressing the problem of training data shortage. Weak supervision makes it possible to have many inputs that help to train the data. Obtaining hand-labeled data sets may be expensive or impracticable. To build a powerful predictive model, weak labels are instead used, despite being inaccurate.

Types

1.Incomplete

2.Inexact

3.Incorrect



Weak supervision is the technique of building models based on new generated data.

Types:

- incomplete
- inexact
- inaccurate

Common Applications

Bootstrapping: Bootstrapping is a technique that can be used in weak supervised learning, where the training data is not fully labeled. This is done by taking a small set of labeled data, and using it to generate additional labels for the rest of the data.

Co-Training: Co-training is a weak supervision technique where multiple models are trained on different subsets of the data. The labels for each instance are predicted by taking a majority vote of different models' predictions

Conclusion

Weak supervised learning Algorithms provide a way to train models when traditional labeled datasets are either unavailable or too noisy to be useful. These algorithms have applications in many different fields, including computer vision, natural language processing, and text classification. If you're working with limited or noisy data, consider using one of the weak supervision techniques described above to train your model.