

Leaper IB-AI Platform

Realistic Feature Generation

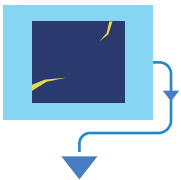
Low-requirement High-quality Feature Generation for Industrial Needs

LEAPER IntelliBlink™-AI (IB-AI) is comprehensive and reliable deep learning system, integrating efficient and fast feature generation. It does not rely on a large volume of feature samples nor require continuous investment. Focusing on the complex and urgent application scenarios of industrial clients, and quickly provides defect detection solutions.

Integrate IntelliBlink™ Vision Tools for Complete Solutions

LEAPER IB-AI strengthens the integration of deep learning and traditional vision algorithms, establishing a smooth data path. Without extensive sample collection and annotation, it can quickly adapt to changing detection standards and occasional detection issues. It eliminates the need for long-term custom development, reducing research and development costs while improving the cost-effectiveness of products.

Cold Start from One Image



Generate a massive amount of trainable features with only a few original samples.

Suitable for Multiple Industrial Sectors



The breakthrough feature generation algorithm can be applied in various industrial products.

Significantly Improve Accuracy

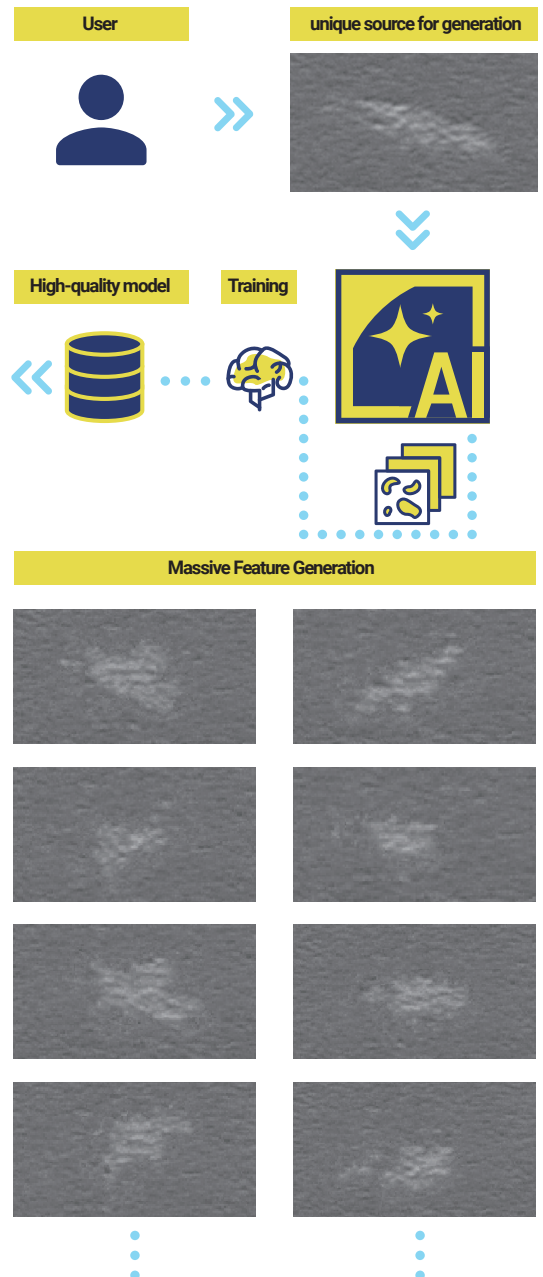


Generated results are realistic, leading to higher accuracy of deep learning models.

Seamless Algorithm Integration



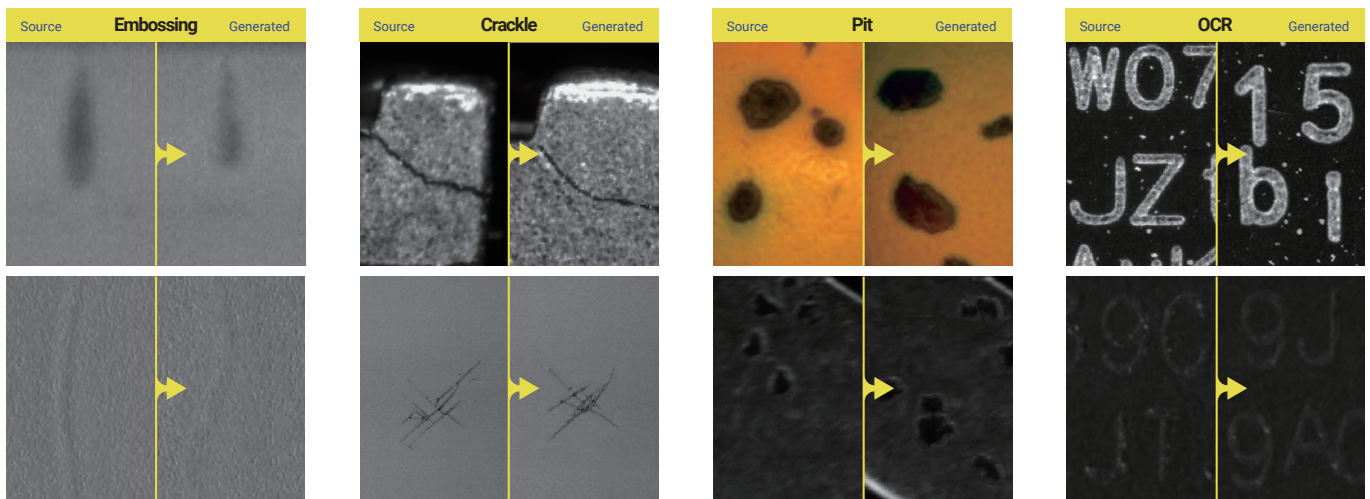
Flexibly combines deep learning with traditional algorithms, aggregating efforts to facilitate solution implementation.



Technology Comparison

	Leaper Feature Generation	Traditional Data Augmentation	Pre-training Data Augmentation
Description	Only a very small number of samples are needed. It takes into account the specificity of industrial products and product defects, generates results with high realistic appearance.	Basic image operations: panning, scaling, cropping, distortion, brightness, flipping, etc. Images do not change intrinsically and are of limited use for the training results.	Sample generation using adversarial neural networks. The images need to be pre-trained with a public gallery such as Microsoft Coco. Generated results are not suitable for industrial use.
Reality	High	Low	Meaningless
Increment	10,000*	10*	1,000*

Diversity of Generated Results

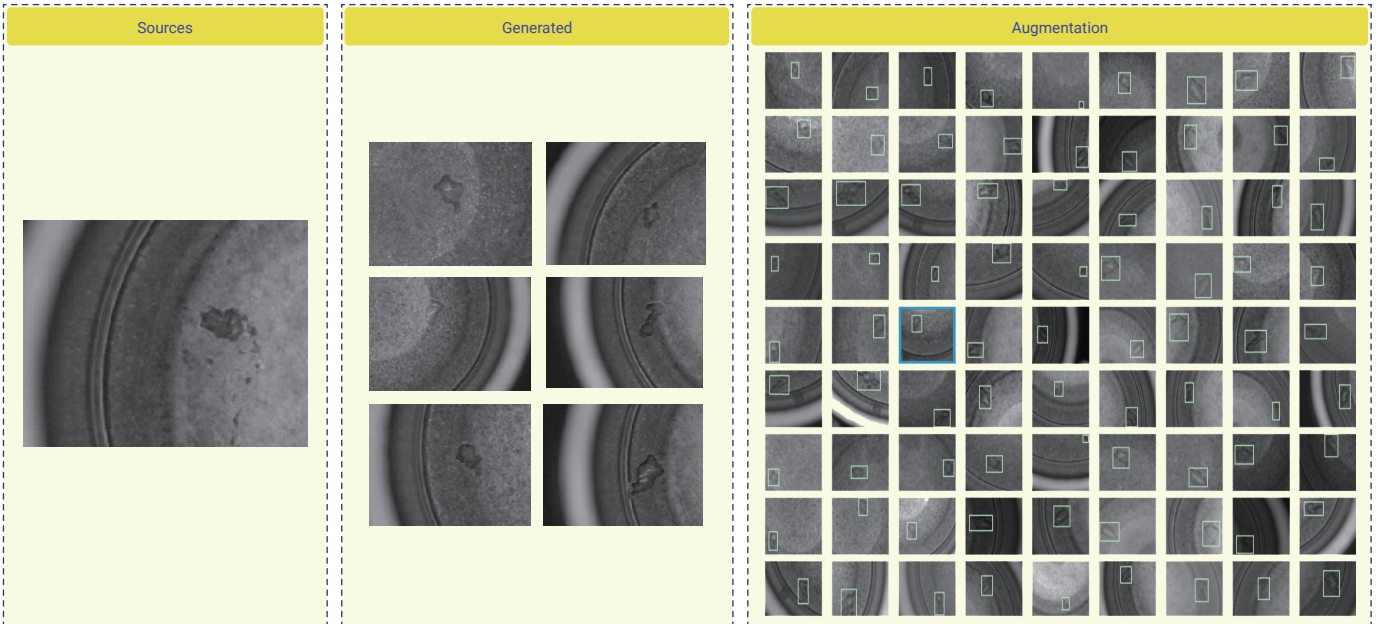


Authenticity of Feature Generation

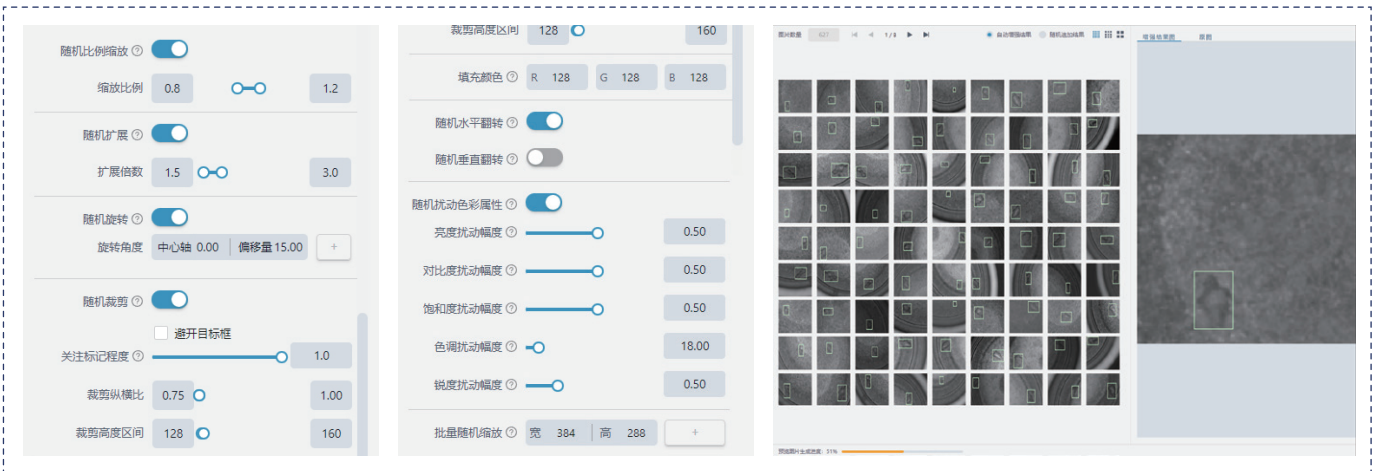
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Augmentation : Use what you see

1. Further increasing the diversity of training samples based on feature generation.



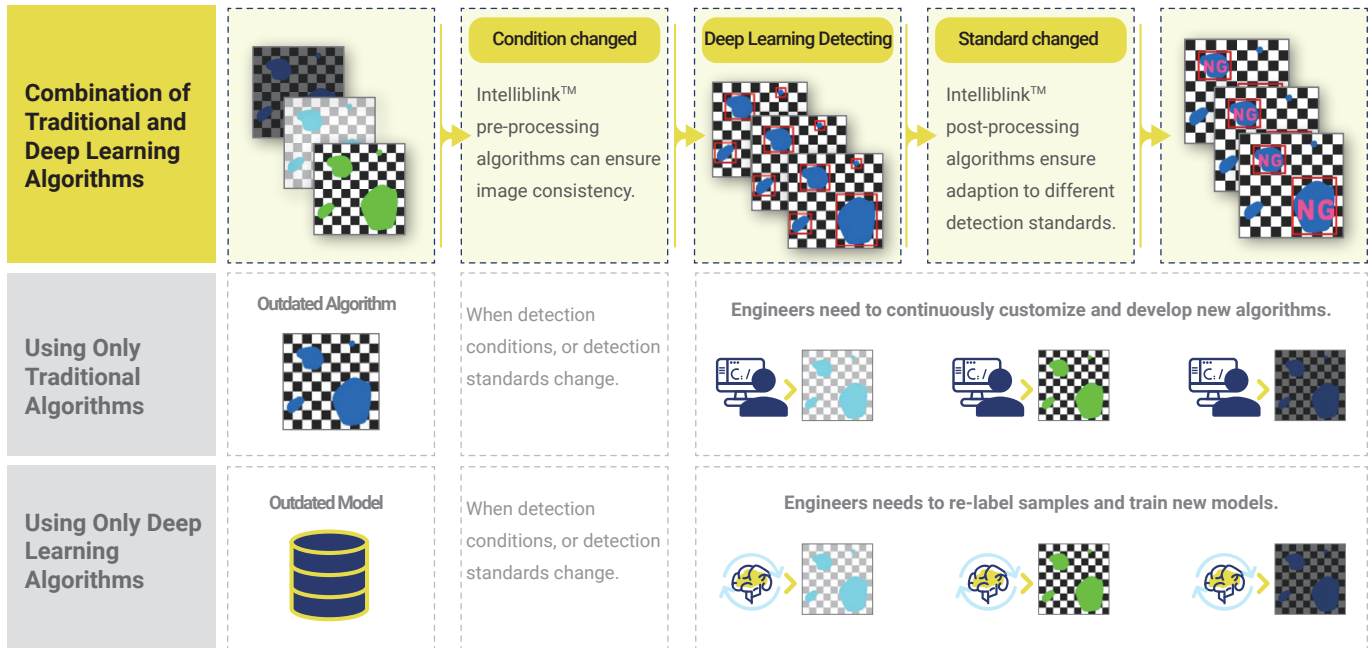
2. Visual display of training pictures to improve the controllability of training results.



3. Preview augmentation results and adjust parameters real-time to optimize data actually used in training.



Integration of Traditional and Deep Learning Algorithms



Application of the Leaper IB-AI Integration in the Detection Workflow

