Shixinda AI
SXD-AI.CN

Algorithm Training & Customization Workflow

Train models on site data, validate, then deploy to edge devices

1 **Data collection**
Site camera snapshots and clips; local upload or device-side data return

2 **Annotation**
Manual and assisted labeling; automatic train/test split with adjustable ratio

3 **Training**
Segmentation / detection / classification; retrain or first-time; small, medium or large network

4 **Evaluation**
Independent test set; one-click start/stop; optional GPU acceleration

5 **Publishing**
Quantization, then generate the SG file the accelerator can execute

Deploy to device
Load into SXD-N430 stations or SXD-NH servers and run locally

Training environment

Standalone GUI software running on a GPU server: **2× Xeon Gold 6126 / 64 GB RAM / 4 TB + 960 GB SSD / 2× RTX 3080 Ti 12 GB**. Training and evaluation can target different GPUs so a team can share one machine.

Continuous improvement loop

Return **false-positive and miss** snapshots from the field, add them to the dataset and retrain: the longer it runs, the more accurate it gets.

field false alarm → data return → retrain → pass evaluation → canary rollout