Yimeng's Selected Publications

ICLR'22 ASP-DAC'23 (Spotlight) **Spatial Dimensionality Pruning and Compressing Temporal Frame Filtering** Detection Software Reinforcement-Kernel-Wise Pruning Complexity-score Reduced Reduced Pattern-Wise Pruning learning based policy Design Frames based detection Regions

Black-box predictor

Black-box

Frame T-1
Frame T-2

Hardware Design Skip Frame T?

Skip Frame Computation

Map to

How to Robustify Black-Box ML Models? A Zeroth-Order Optimization Perspective Data-Model-Circuit Tri-Design for Ultra-Light Video Intelligence on Edge Devices

Map to

Tile-based Architecture



White-box denoiser

White-box







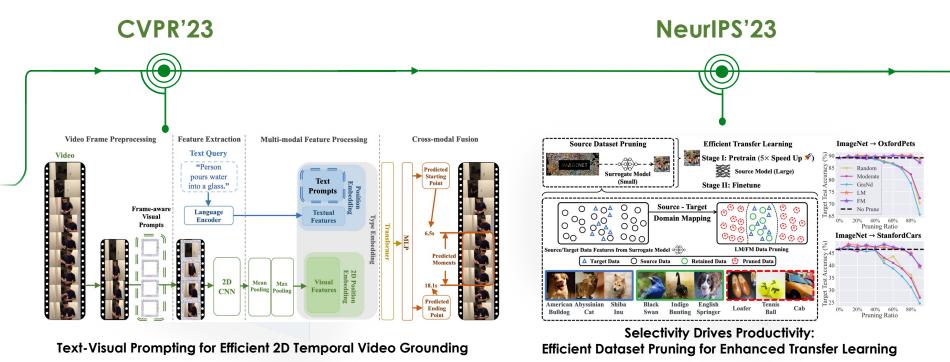
Kernel-wise

Pruning

Pruning-aware Parallelism

Map to

Yimeng's Selected Publications



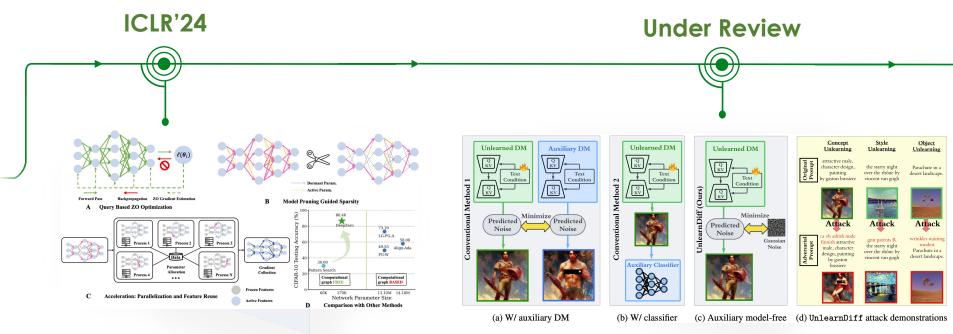


MICHIGAN STATE





Yimeng's Selected Publications



DeepZero: Scaling up Zeroth-Order Optimization for Deep Model Training

To Generate or Not? Safety-Driven Unlearned Diffusion Models Are Still Easy To Generate Unsafe Images ... For Now







