Pre-Trained Diffusion Model

Permanent Memory: Prior Experience

ATD Using Pre-trained Diffusion Model

Transient Memory is not active

ATD based on Permanent Memory

Updating H-Model with Pre-trained Diffusion Model during ATD

Partially Active Transient Memory

ATD based on Permanent Memory And Partially Active Transient Memory: Adapt given the current observation...

ATD Using H-Model and Pre-trained Diffusion Model

Fully Active Transient Memory

ATD based on Permanent Memory And Fully Active Transient Memory: Adapt given the current observation...

Target Species: Ladybug Distribution

After Observing 20 samples ✗   After Observing 100 samples ✗

Permanent Memory: Only Experience

After Observing 20 samples   After Observing 100 samples ✓

Permanent and Transient Memory: Adapt with Experience   Permanent and Transient Memory: Adapt with Experience