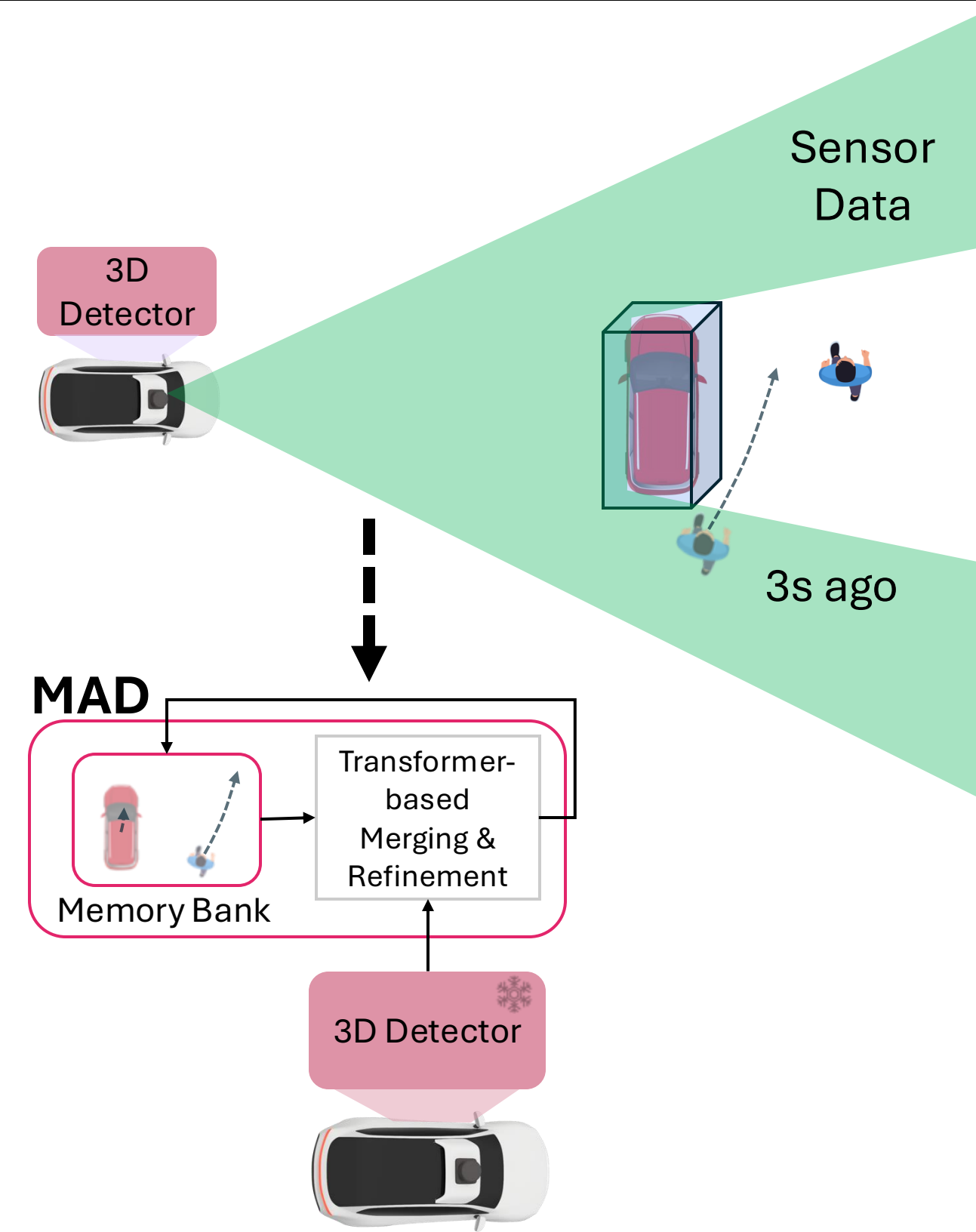


Motivation

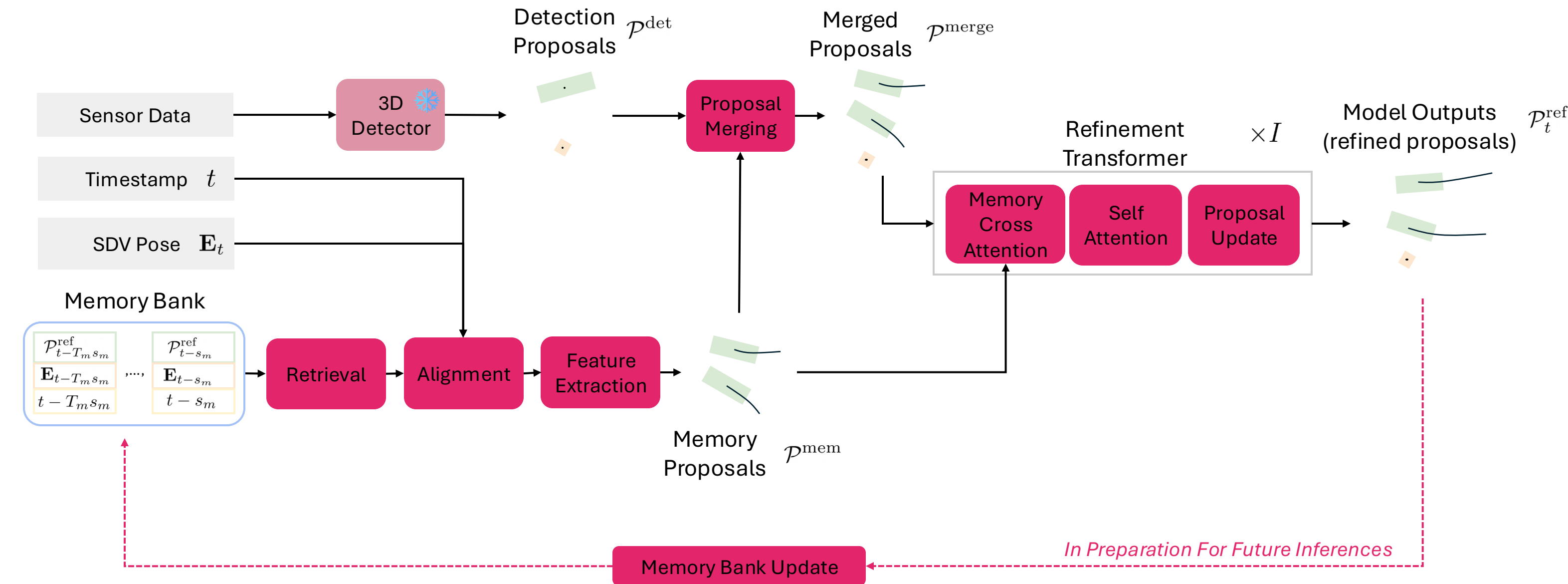
- Existing detectors use current sensor data
- Limited evidence: occlusion, long range
- Humans overcome this with **memory**
- Idea:** Enhance existing detector with learned memory



Model

Goals: Sensor agnostic, off the shelf detector

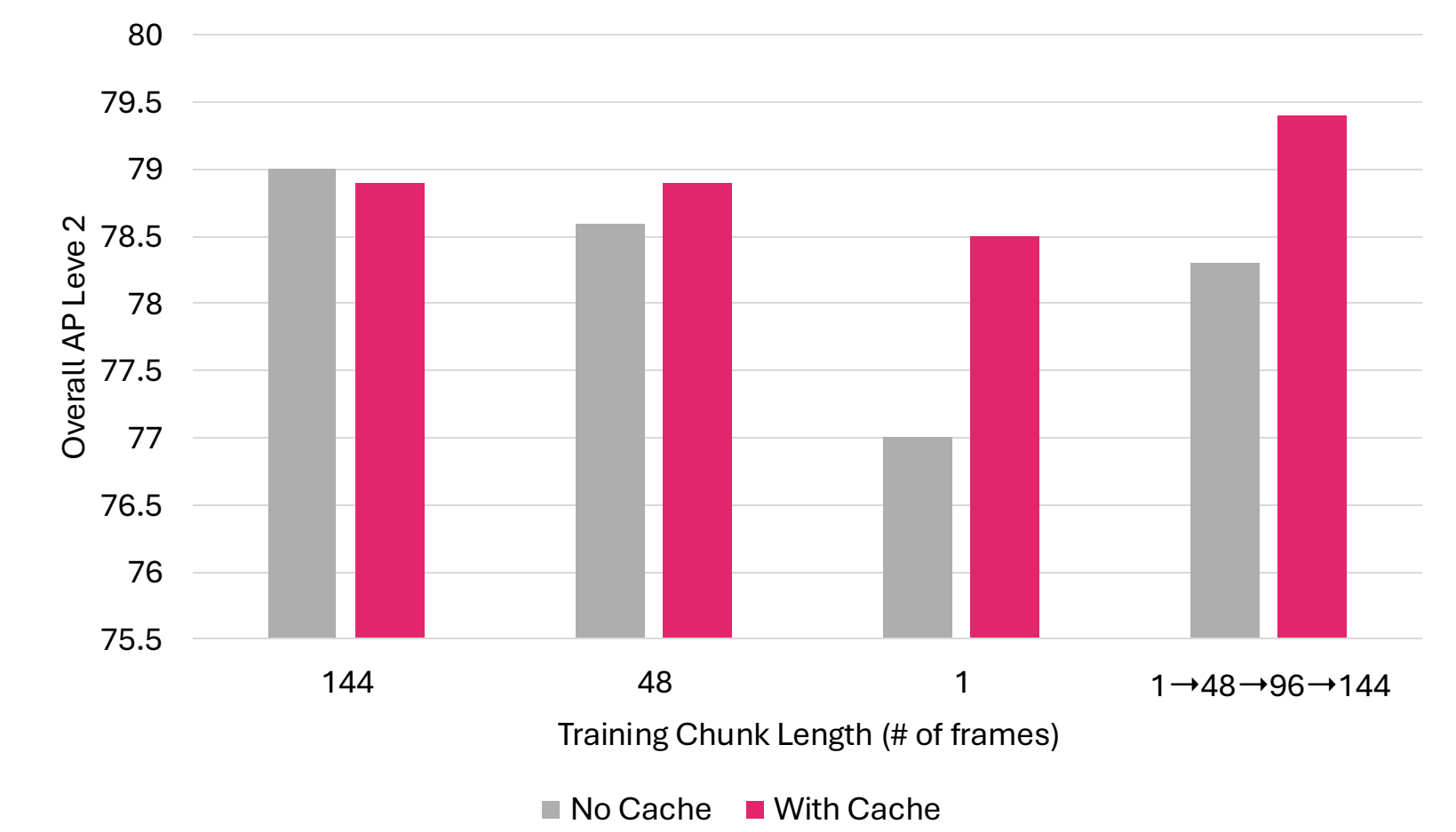
Idea: Learn to leverage *memory bank* of past detections and forecasts



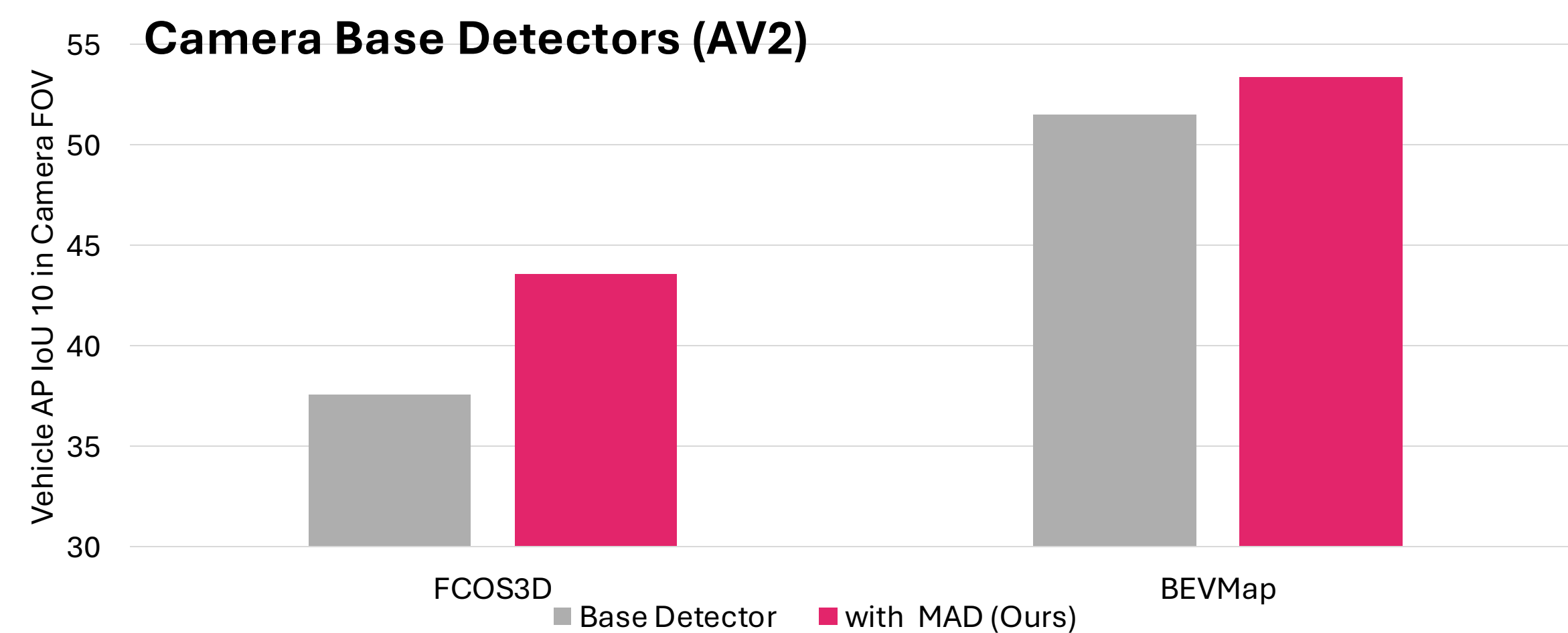
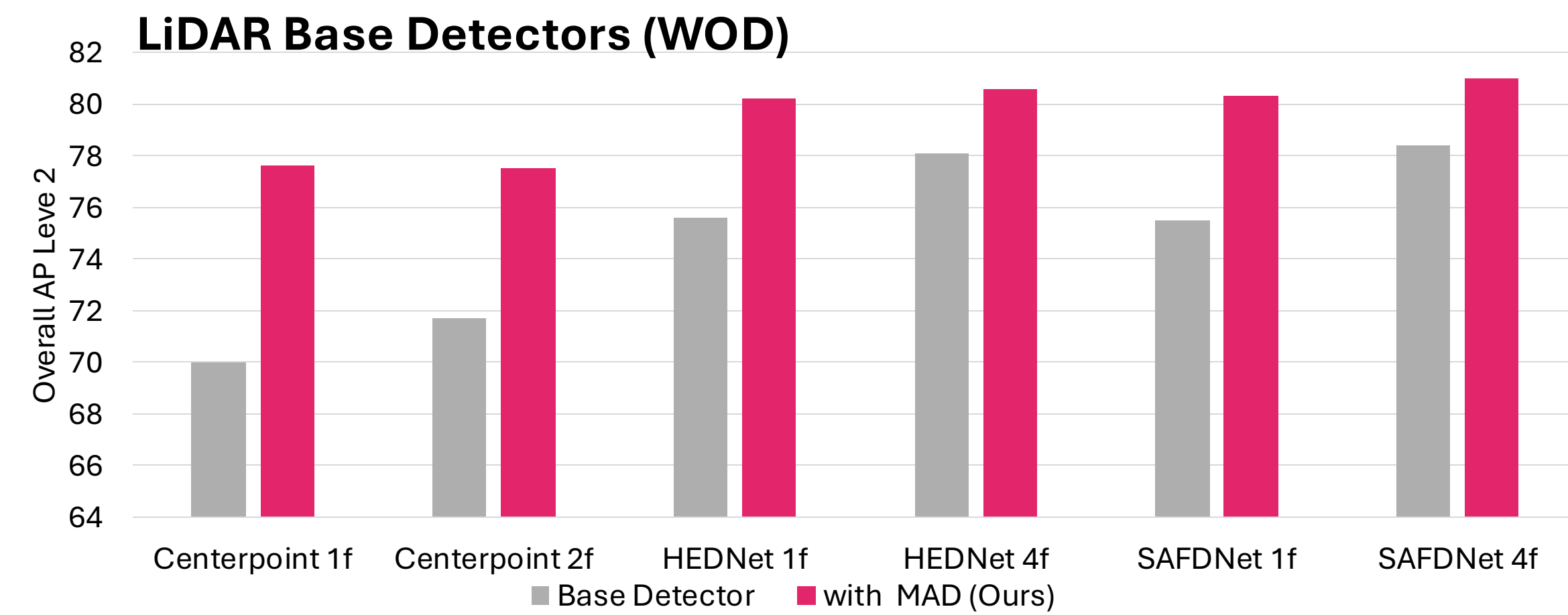
Training

Problem: Training on correlated sequences hurts learning

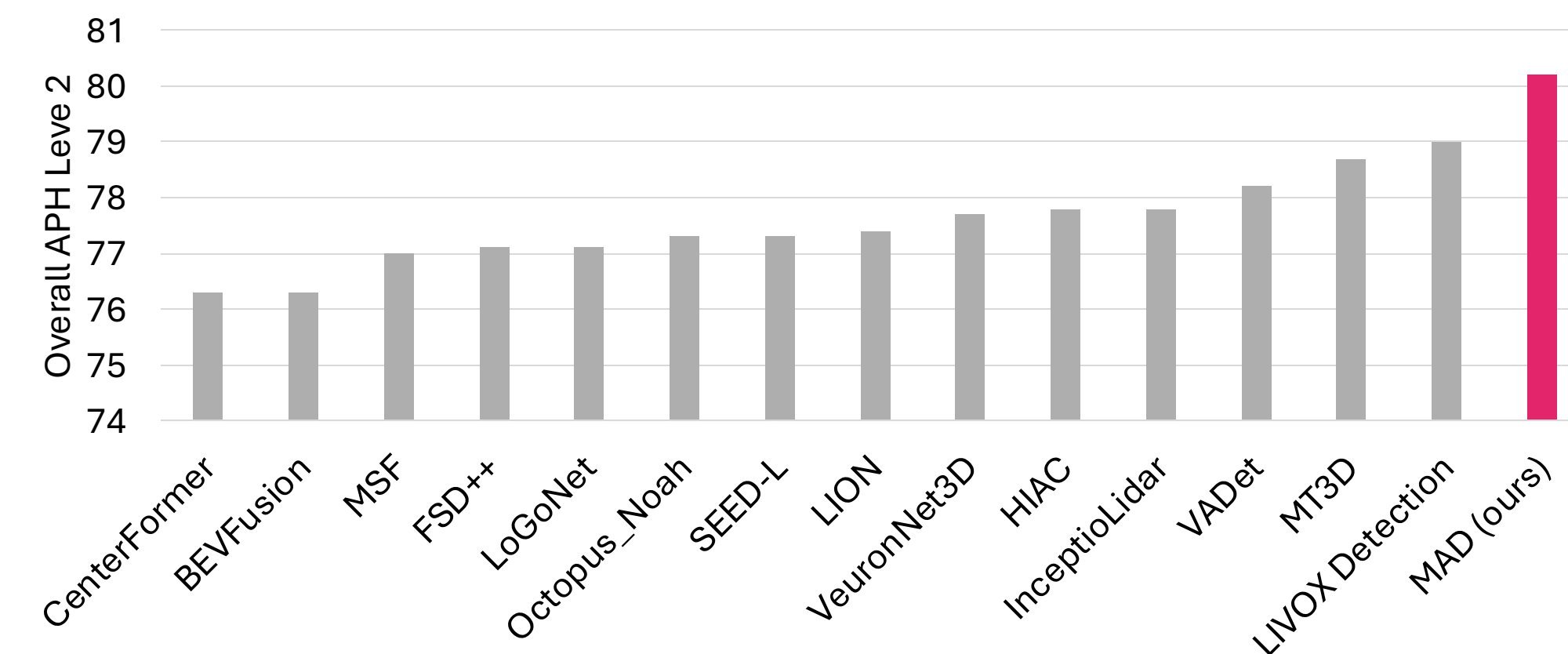
Idea: Cache past model outputs & use a *schedule* of increasing sequence lengths



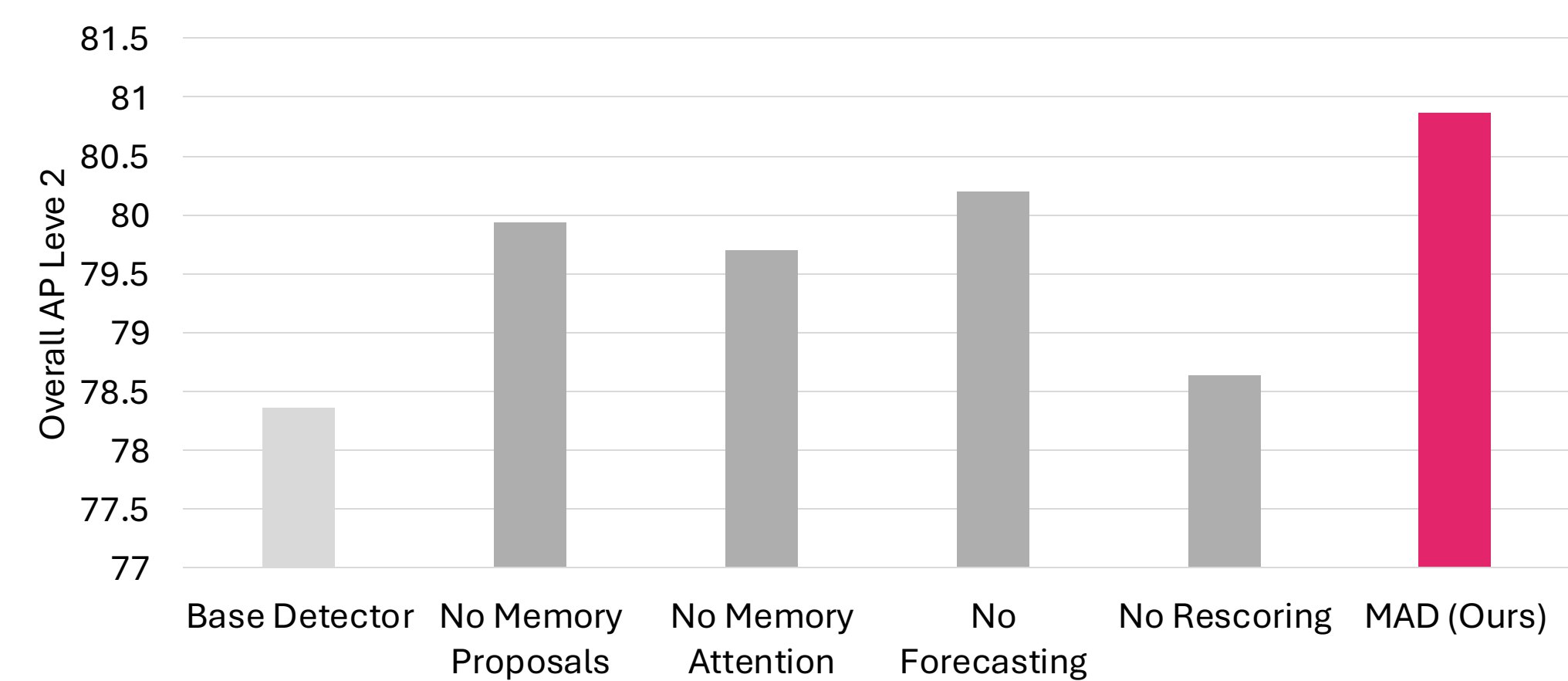
Enhancing Base Detector



WOD Leaderboard



Architecture Ablation



Qualitative Results

