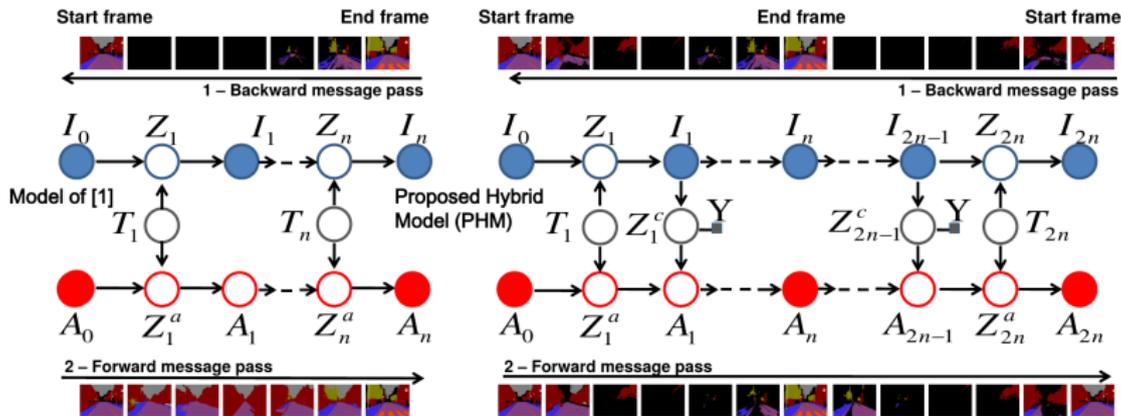


Label propagation in complex video sequences using semi-supervised learning

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- ▶ Directed graphical model for label propagation in long and complex video sequences
- ▶ Given hand-labelled (semantic labels) start and end frames of a video sequence
- ▶ Hybrid of generative label propagation and discriminative classification
- ▶ EM based inference used for initial propagation and training of a multi-class classifier
- ▶ Labels estimated by classifier are injected back into Bayesian network for another iteration
- ▶ Iterative scheme has the ability to handle occlusions
- ▶ Time-symmetric label propagation by appending the time-reversed sequence
- ▶ Show advantage of learning from propagated labels
- ▶ Quantitative and qualitative results on CamVid