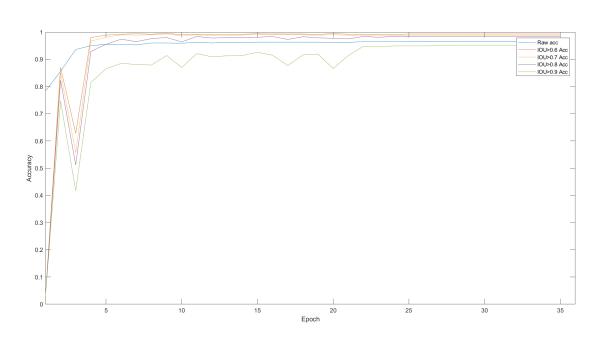
# Vehicle Interaction Learning

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## Result



Y vs Lane: coordinate measurement error

#### 4121 training samples, 1031 test samples

Metric	Best
Raw Acc	96.6%
IOU>0.6 Acc	99.3%
IOU>0.7 Acc	98.8%
IOU>0.8 Acc	98.3%
IOU>0.9 Acc	95.2%

IOU	#Negative Sample
<0.6	7
0.6-0.7	5
0.7-0.8	6
0.8-0.9	32

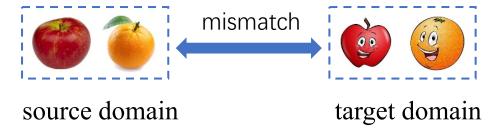
#### Future Work

- 1. Add entirely negative samples?
- Idea 1: add a task about classify whether or not one trajectory includes this kind of interaction? (Conditional Loss Function)
- Idea 2: window

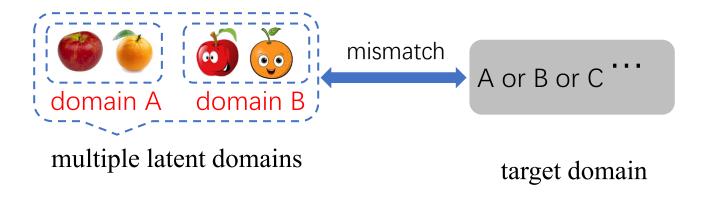
- 2. Process position, velocity, and acceleration further?
- 3. Shared LSTM + Residual Block

#### Future Work

□ Domain adaptation: unlabeled target domain is seen in the training stage.



□ Domain generalization: unlabeled target domain is unseen in the training stage.



### Future Work: zero-shot learning for domain adaption

