

# Bi-PointFlowNet

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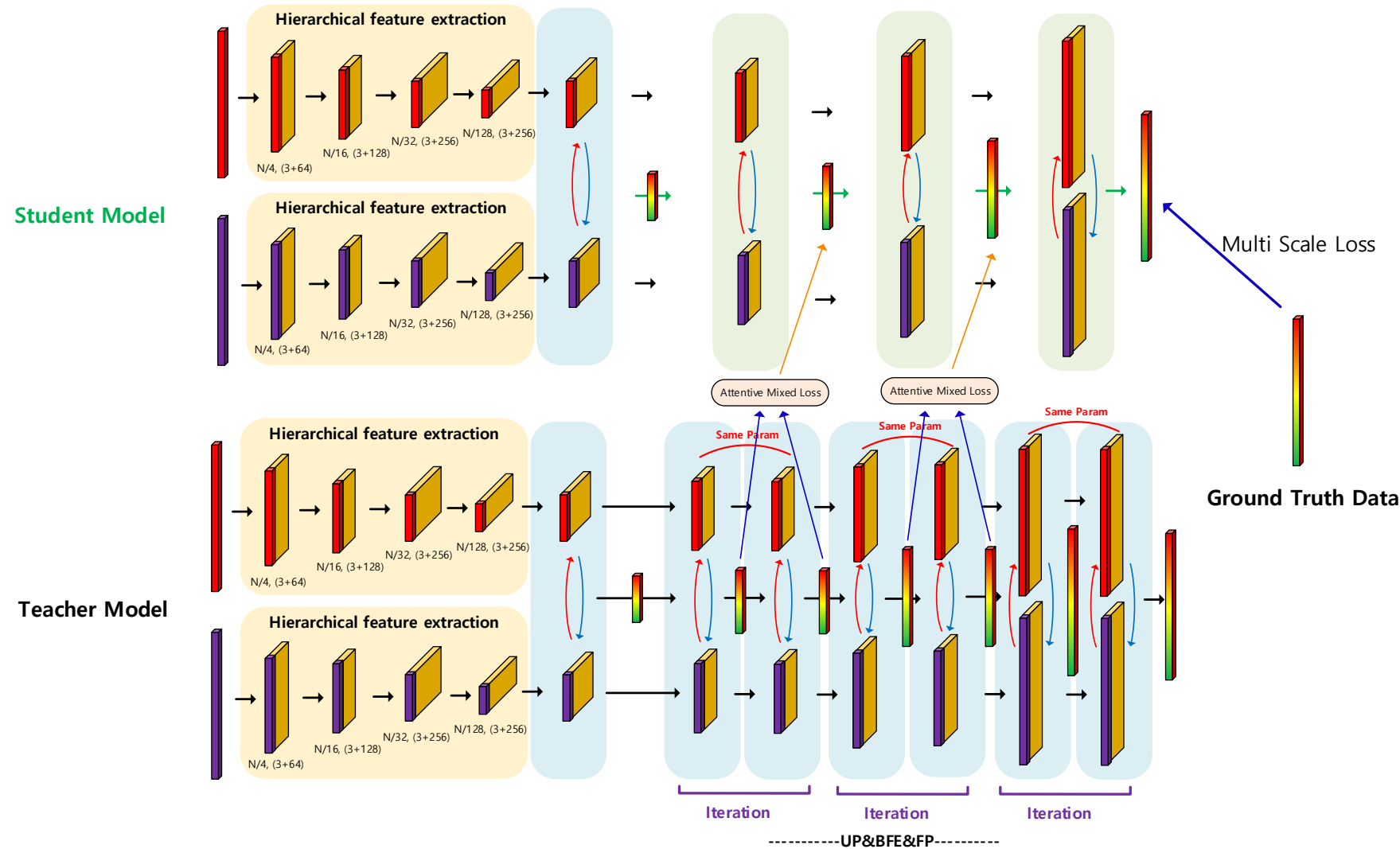
10차 보고

# Experiment – Inference Time 측정

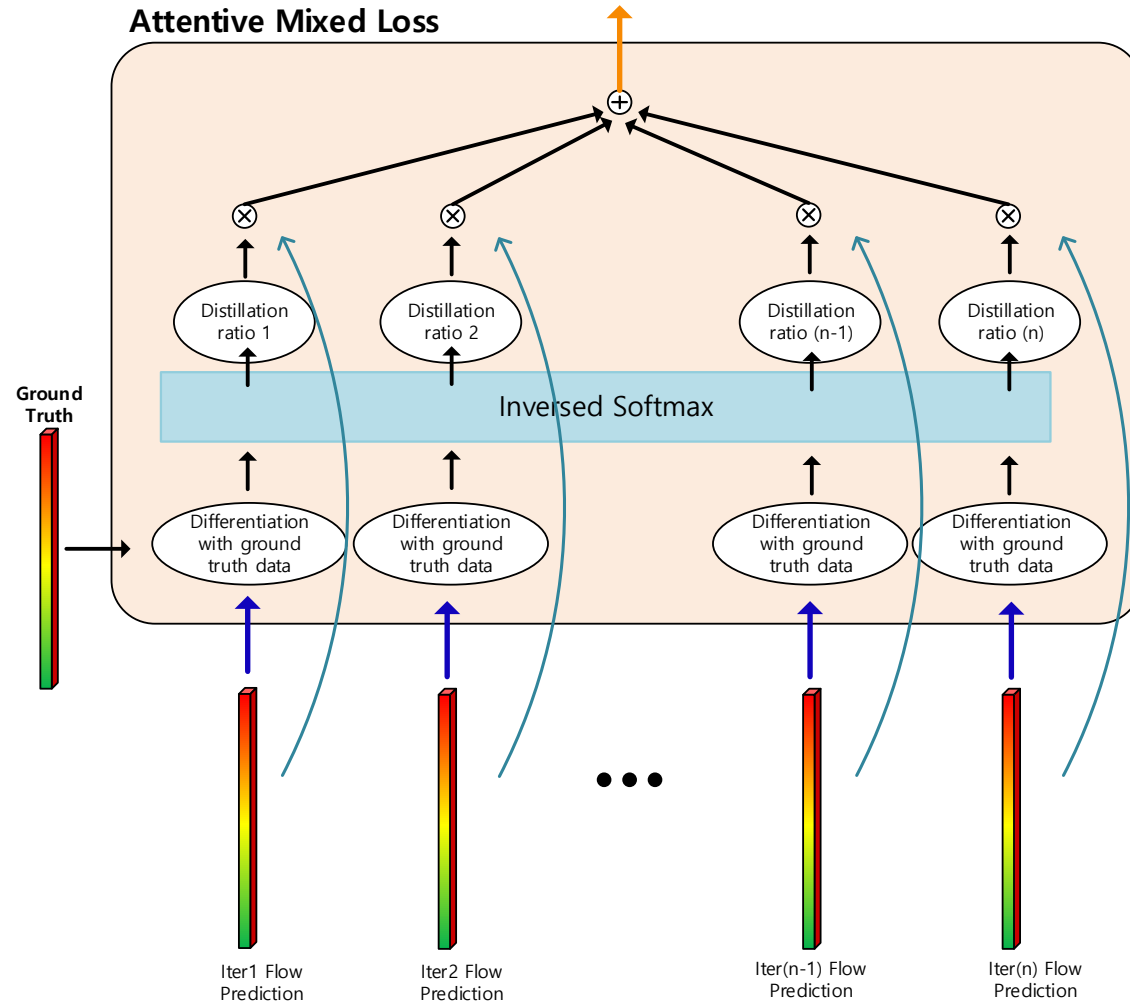
RTX 2070 Max-Q

Architecture	Points	FLOPs	Params	Inference Time
<b>Baseline</b>	8192	13.360G	7.957M	0.221s (8.3FPS)
	4096	10.459G		0.109s
<b><math>C_{mid}=4</math>, K=16</b>	8192	7.368G	2.732M	0.213s
	4096	6.124G		0.107s
	2048	5.501G		0.070s
<b><math>C_{mid}=8</math>, K=16</b>	8192	9.365G	4.474M	0.213s
<b>Iterative <math>C_{mid}=8</math>, feat</b>	8192	13.070G	4.339M	0.518s
	4096	10.917G		0.223s
<b>Non-Iterative <math>C_{mid}=8</math>, feat</b>	8192	8.165G	4.339M	0.302s

# Experiment – Blending Knowledge Distillation



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# Experiment – WeightNet8\_FG

	Baseline	WeightNet8_FG
FLOPs	13.1G	8.16G
Param	4.34M	4.34M

Teacher:  $c_{mid}=8$ , feat,  $l=2$

Epoch 245

**WeightNet8\_FG**( $C_{mid}=8$ , feat,  $l=1$ )

Loss Function	Dataset	EPE3D(↓)	ACC3DS(↑)	ACC3DR(↑)	Outliers3D(↓)	EPE2D(↓)	ACC2D(↑)
Scratch	FlyingThings	0.0280(현재: 0.0252)	0.921	0.981	0.157	1.497	0.932
	KITTI	0.0319	0.912	0.960	0.146	1.143	0.949
Blendeing KD	FlyingThings	0.0298	0.910	0.979	0.165	1.608	0.923
	KITTI	0.0368	0.895	0.948	0.157	1.292	0.927
Blending KD + Hint	FlyingThings						
	KITTI						
Bi-Directional Hint Training Loss + Scratch	FlyingThings						
	KITTI						