

# Viewpoint-aware Channel-wise Attentive Network for Vehicle Re-identification

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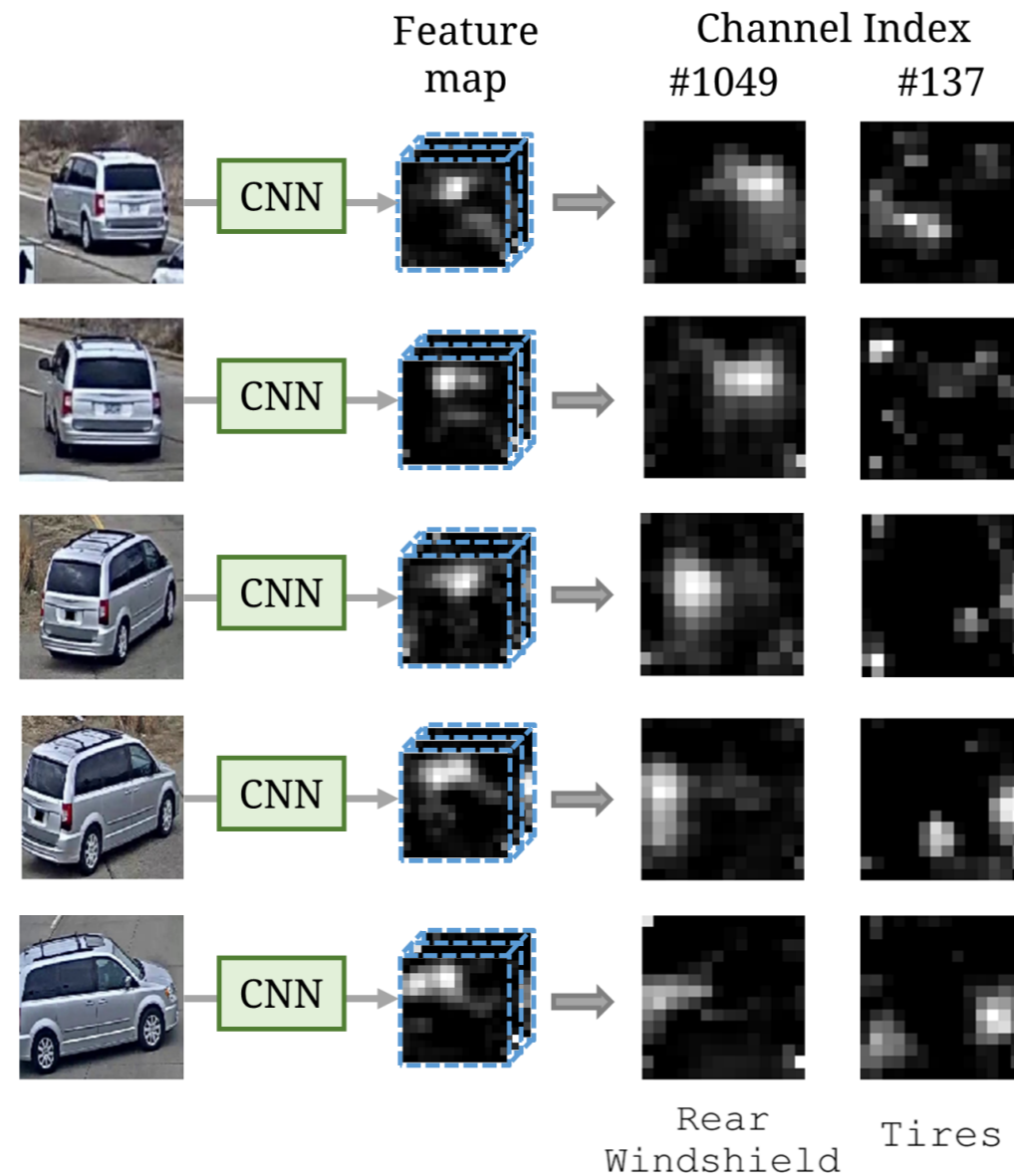
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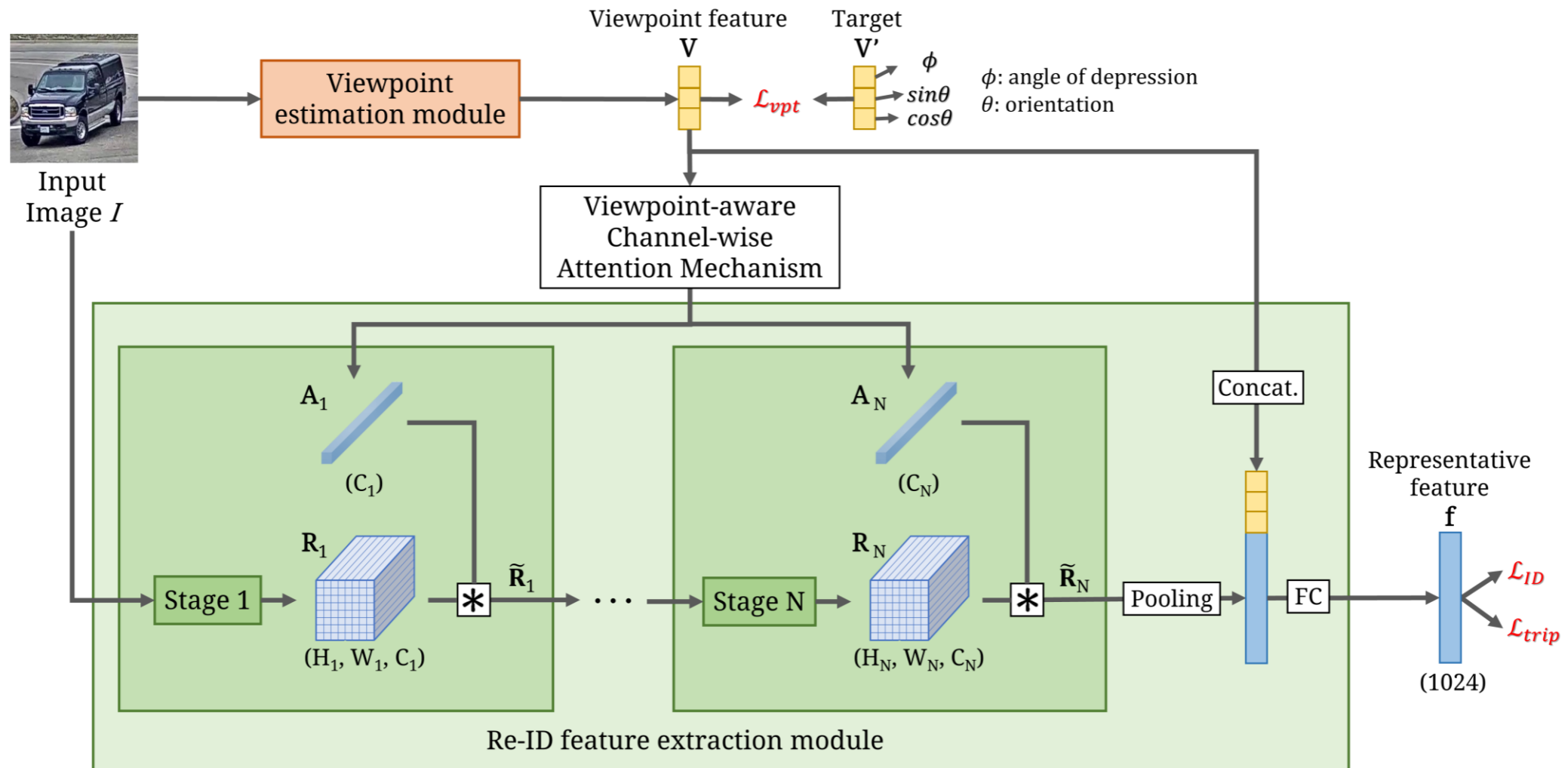
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# Channel-wise Feature in Vehicle Re-ID



# Viewpoint-aware Channel-wise Attentive Network



# Ablation Study

Table 1: Ablation study of our proposed VCAM (%).

Model	VeRi-776		CityFlow-ReID	
	mAP	R-1	mAP	R-1
ResNeXt-101	61.5	93.2	37.3	54.1
SE-ResNeXt-101	63.2	93.8	38.9	55.2
<b>VCAM (Ours)</b>	<b>68.6</b>	<b>94.4</b>	<b>46.8</b>	<b>63.3</b>

# Comparison with the State-of-the-Arts

Table 2: **Comparison with state-of-the-arts re-ID methods in VeRi-776(%)**. Upper Group: attentive feature learning methods; Lower Group: the others. Note that all listed scores are from the methods **without** adopting any spatial-temporal information [16] and extra post processing such as re-ranking [33] .

Method	VeRi-776		
	mAP	R-1	R-5
OIFE [25]	48.0	68.3	89.7
VAMI [34]	50.1	77.0	90.8
RAM [17]	61.5	88.6	94.0
AAVER [11]	61.2	89.0	94.7
GRF-GGL [18]	61.7	89.4	95.0
GSTE [1]	59.5	-	-
EALN [19]	57.4	84.4	94.1
MoV1+BS [12]	67.6	90.2	96.4
MTML [10]	64.6	92.3	95.7
<b>VCAM (Ours)</b>	<b>68.6</b>	<b>94.4</b>	<b>96.9</b>

Table 2. Summary of the Track 2 leader board.

Rank	Team ID	Team name (and paper)	Score
1	73	Baidu-UTS [47]	0.8413
2	42	RuiyanAI [48]	0.7810
3	39	ZJU [12]	0.7322
4	36	Fraunhofer [10]	0.6899
7	72	UMD [29]	0.6668
15	38	NTU [7]	0.5781
19	9	BUPT [19]	0.5354
20	35	TUE [35]	0.5166
26	80	HCMUS [43]	0.3882
27	85	Modulabs [15]	0.3835
30	66	UAM [22]	0.3623
N/A (General)	87	CUMT [11]	0.6656
N/A (General)	68	BUAA [28]	0.6522
N/A (General)	75	UAlbany [6]	0.0368