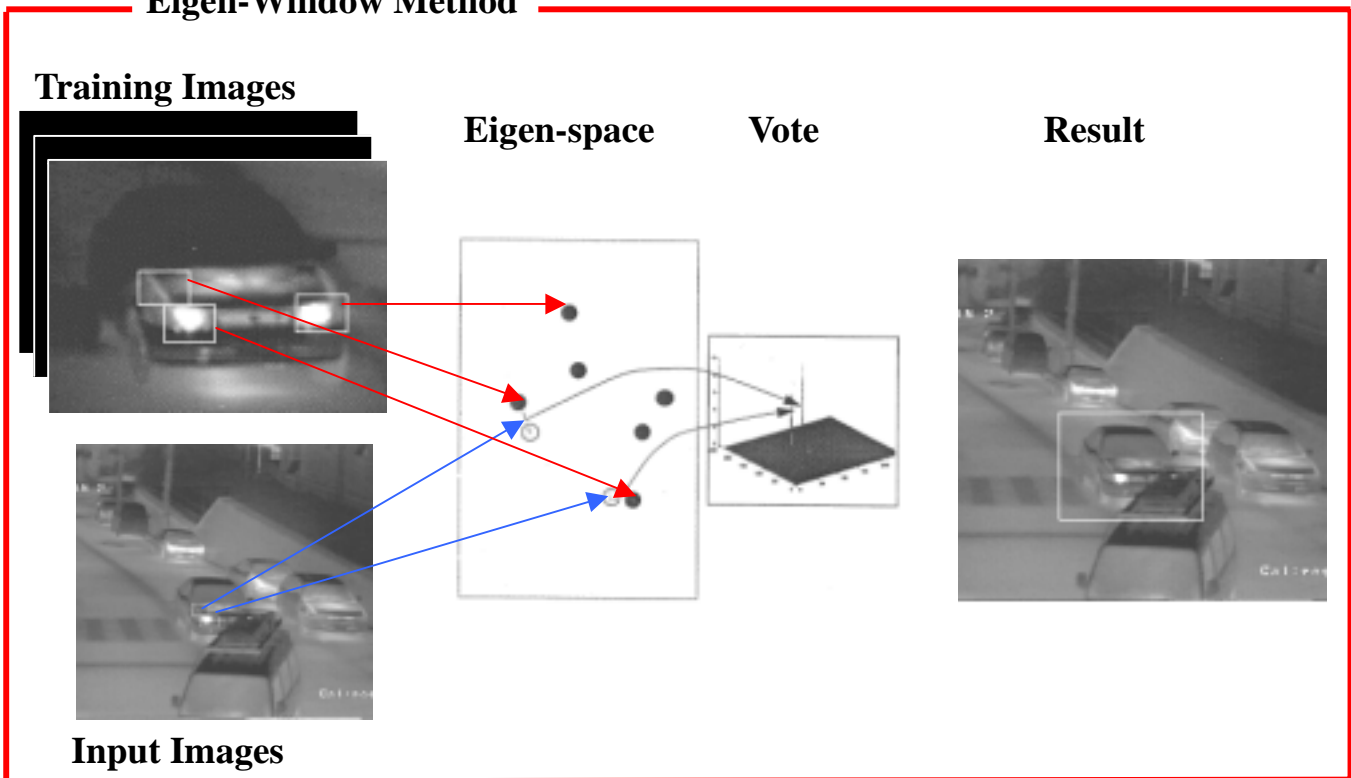


Vehicle Recognition in Infrared Images Using Parallel Vision Board

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Eigen-Window Method



Recognition Result

Training Image

Binary Image

Code Features

Recognition

Outdoor Experiment Results

# of input images		Day	Night	Total	PCT
With the vehicle	Succ.	94	88	182	91%
	Fail.	6	12	18	
Without vehicle	Succ.	100	100	200	100%
	Fail.	0	0	0	

Reference:

- Ohba, Ikeuchi, "Detectability, Uniqueness and Reliability of Eigen-Windows for Robust Recognition of Partially Occluded Objects", IEEE PAMI, Vol.19, No.9,1997.
- Krumm, "Object Detection with Vector Quantized Binary Features", CVPR 1997.
- Kagesawa, Ueno, Ikeuchi, Kashiwagi, "Recognizing Vehicle in Infra-Red Images Using IMAP Parallel Vision Board", IEEE Trans. on ITS, vol.2, no.1, March 2001.