ポスター番号：25

Multiple Kernel Learning for Object Classification

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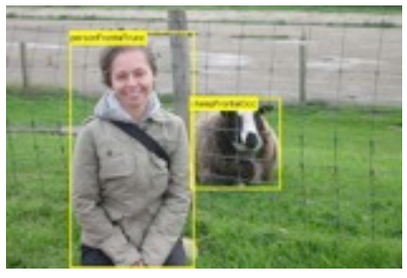
画像識別

→ 椅子



→人、羊

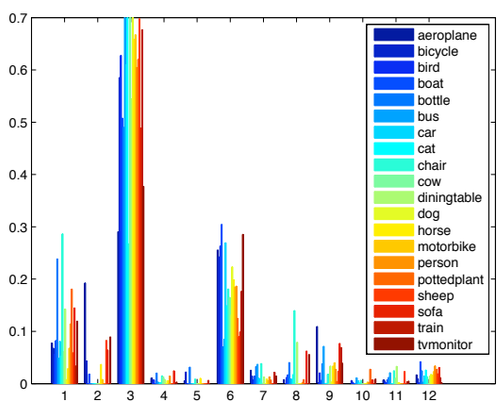
$\{k_l(x,x')\}_{l=1}^{L}$

SIFT, phog, ...
grey, RGB, opponent color, ...
pyramid structure

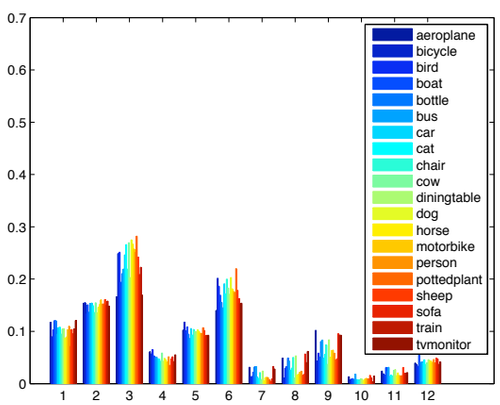
複数の特徴量（カーネル）を組み合わせて使うが、
従来法（sparseMKL）では精度が上がらない場合が多い。

⇨ non-sparse MKL

$$K(x,x') = \sum_l \beta_l k_l(x,x') \qquad \{\beta_l \geq 0\} \qquad \cancel{\sum_l \beta_l = 1}$$



ℓ_1



ℓ_p

non-sparse constraint

$$\sum_l \beta_l^p = 1 \qquad (p \geq 1)$$

	uniform	ℓ^1	ℓ^p-joint	ℓ^p-single
mean AP	40.8±1.0	40.8±0.9	**42.6±0.7**	**42.3±0.9**