

Fastest Pedestrian Detector in the West [Piotr Dollar et al]

- For scale invariant features based on statistic of natural images, features computed at one scale can be used to approximate features computed withing nearby scale.
- Approximation is accurate within a scale octave
- Hence we can have sparse pyramid with one scale per octave
- Approximation : $f(I, s) \approx a f(I, 0) e^{-\lambda s}$
 - Where
 - f is statistic function (feature)
 - a, λ are constant
 - I is image
 - s is scale
- Estimate a, λ by least square fit
- 1-2 per cent loss in accuracy but 10-100 times faster than computing methods