

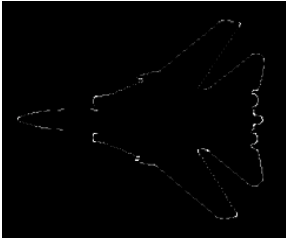





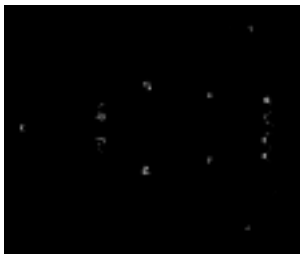
$$\kappa(t) = \frac{\dot{x}(t)\ddot{y}(t) - \dot{y}(t)\ddot{x}(t)}{[\dot{x}^2(t) + \dot{y}^2(t)]^{3/2}}$$

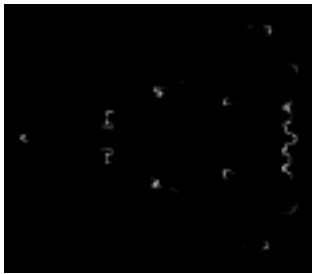
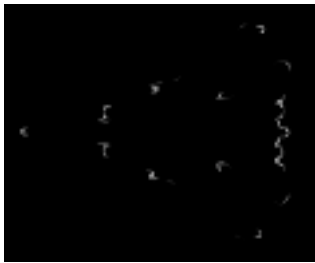
$$k_n(t) = \frac{1}{n} \sum_{i=1}^n \phi_{t+i} - \frac{1}{n} \sum_{i=-n}^{-1} \phi_{t+i}$$

	
(a) image	(b) detected corners
Curvature Detection by Difference	


Curvature Detection via Curve Fitting (via $\kappa(t)$)

$$\kappa_{\phi}(x,y) = \frac{1}{\left(Mx^2 + My^2\right)^{\frac{3}{2}}} \left\{ My^2 \frac{\partial Mx}{\partial x} - MxMy \frac{\partial My}{\partial x} + Mx^2 \frac{\partial My}{\partial y} - MxMy \frac{\partial Mx}{\partial y} \right\}$$

	
(a) κ_{ϕ}	(b) $\kappa_{-\phi}$
	
(c) $\kappa_{\perp\phi}$	(d) $\kappa_{-\perp\phi}$
Comparing Image Curvature Detection Operators	

	
(a) $\kappa_{u,v}(x,y)$	(b) $\kappa_k(x,y)$
Curvature via the Harris Operator	