Notation	Meaning
\mathcal{A}	$\sigma - Algebra$
$\mathcal{B}(\mathbb{R}^n)$	Borel $\sigma-Algebra$ over \mathbb{R}^n
P	Probability measure
$\mathbf{x}, \mathbf{y}, \mathbf{z},$	random variables and vectors
$p_{\hat{ heta}}(\cdot)$	pdf and pmd parameterized by $ heta$
Θ	parameter space
$\mathcal{F}_{p_{\mathbf{x}}}$	parametric family of density $p_{\mathbf{x}}$
\sum	covariance matrix