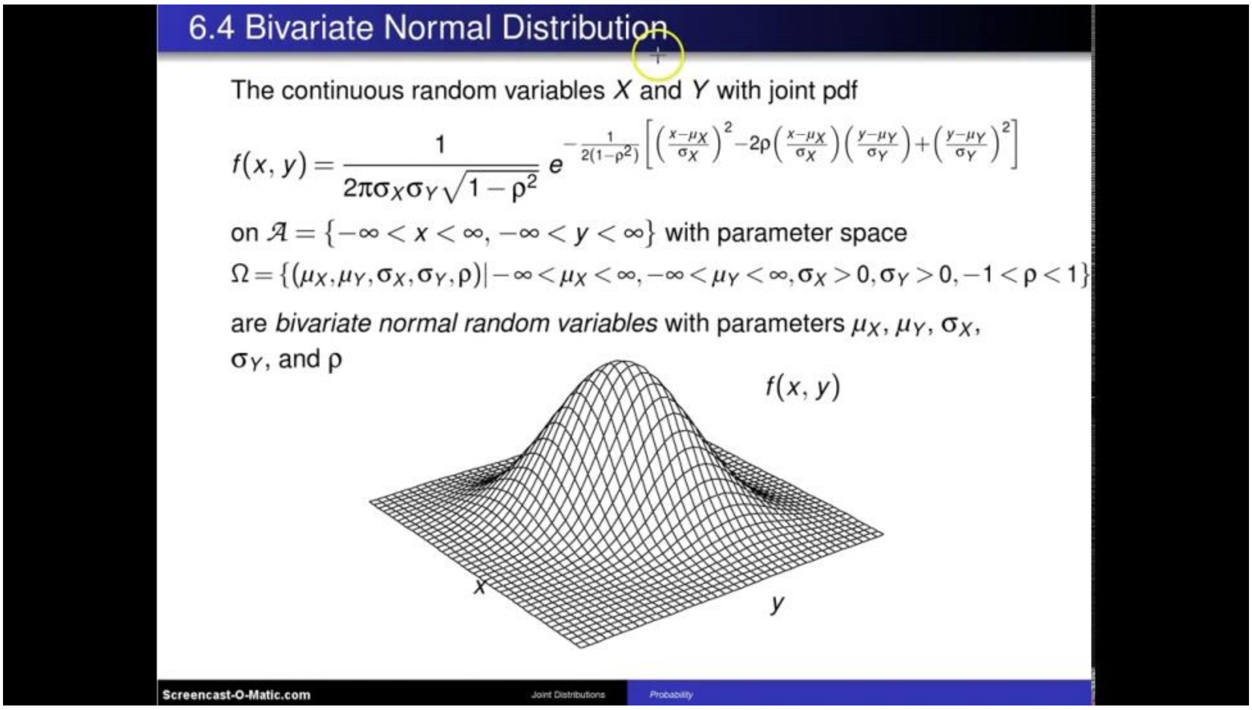
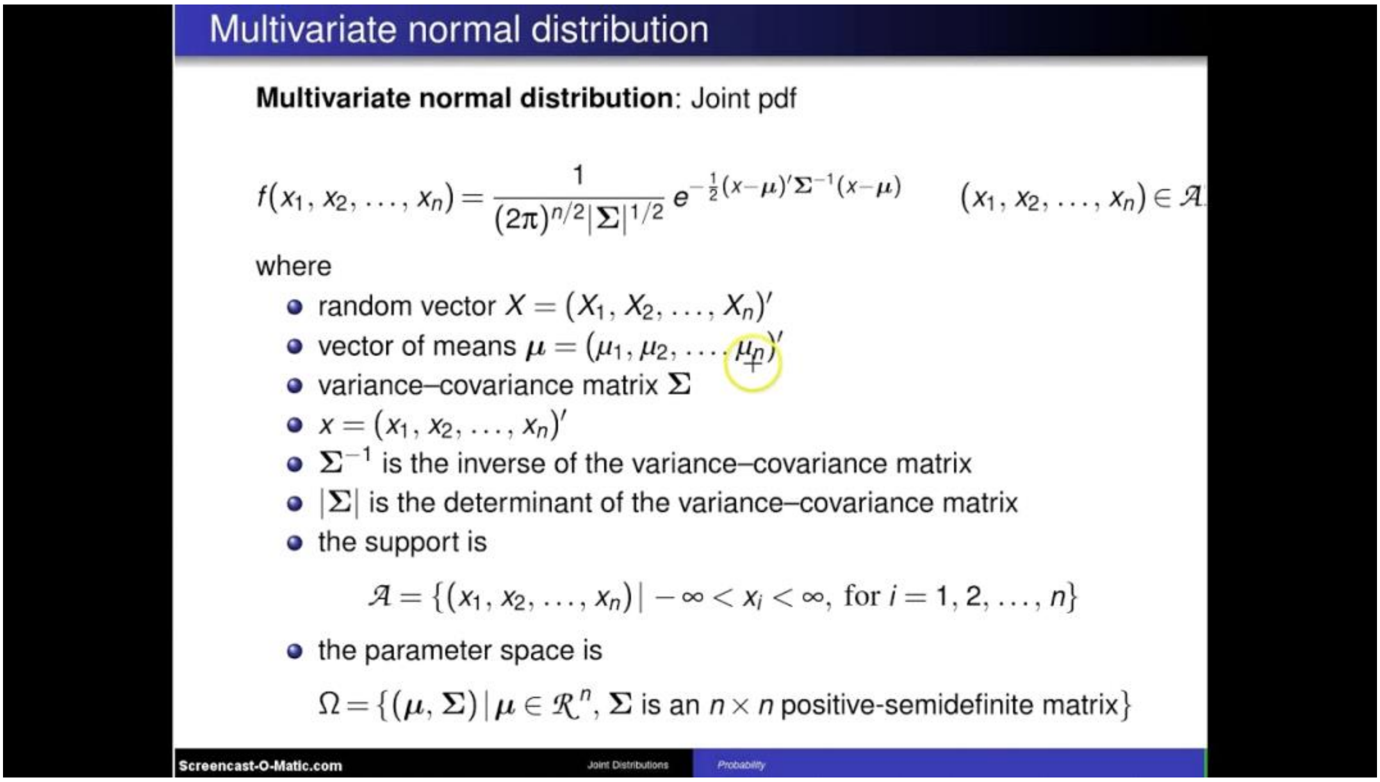
Discriminant

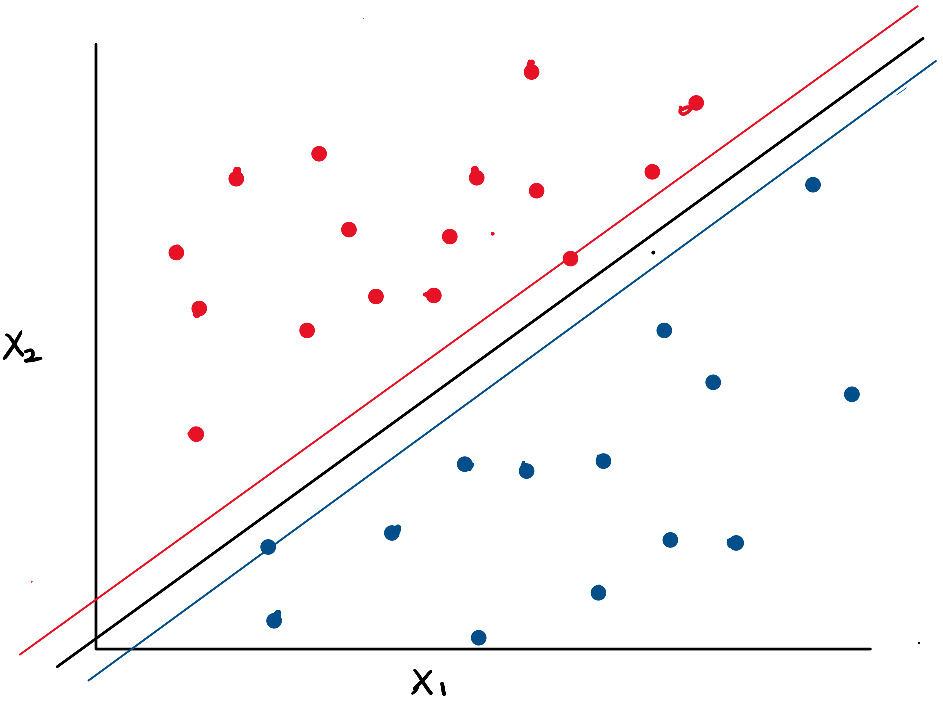
02 May 2024 08:16





$$\boxed{\delta_i(x) = x\frac{\mu_i}{\sigma^2} - \frac{\mu_i^2}{2\sigma^2} + \log(\mathrm{P}(C_i))}$$

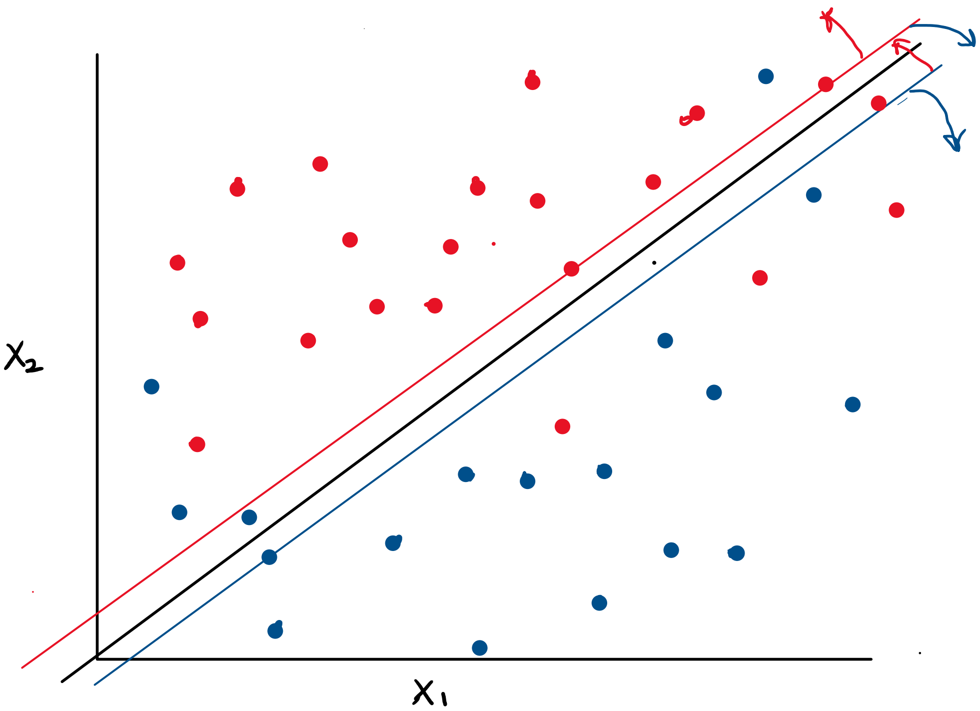
$$\boxed{\delta_i(\bar{x}) = x^T \Sigma^{-1} \mu_i - \frac{1}{2}\mu_i^T \Sigma^{-1} \mu_i + \log(P(C_i))}$$



Training Data

X_1	X_2	y
		1
		0
		0
		1
		0
		1
		0

Testing Data



params	plit0_test_scor	plit1_test_scor	plit2_test_scor	plit3_test_scor	plit4_test_scor	nean_test_scor	std_test_score	ank_test_sc
{'C': 0.1}	0.705882	0.8125	0.875	0.875	0.6875	0.791176	0.0806615	5
{'C': 1}	0.705882	0.8125	0.875	0.875	0.75	0.803676	0.0673748	1
{'C': 0.5}	0.705882	0.8125	0.875	0.875	0.75	0.803676	0.0673748	1
{'C': 2}	0.705882	0.8125	0.875	0.875	0.75	0.803676	0.0673748	1
{'C': 3}	0.705882	0.8125	0.875	0.875	0.75	0.803676	0.0673748	1