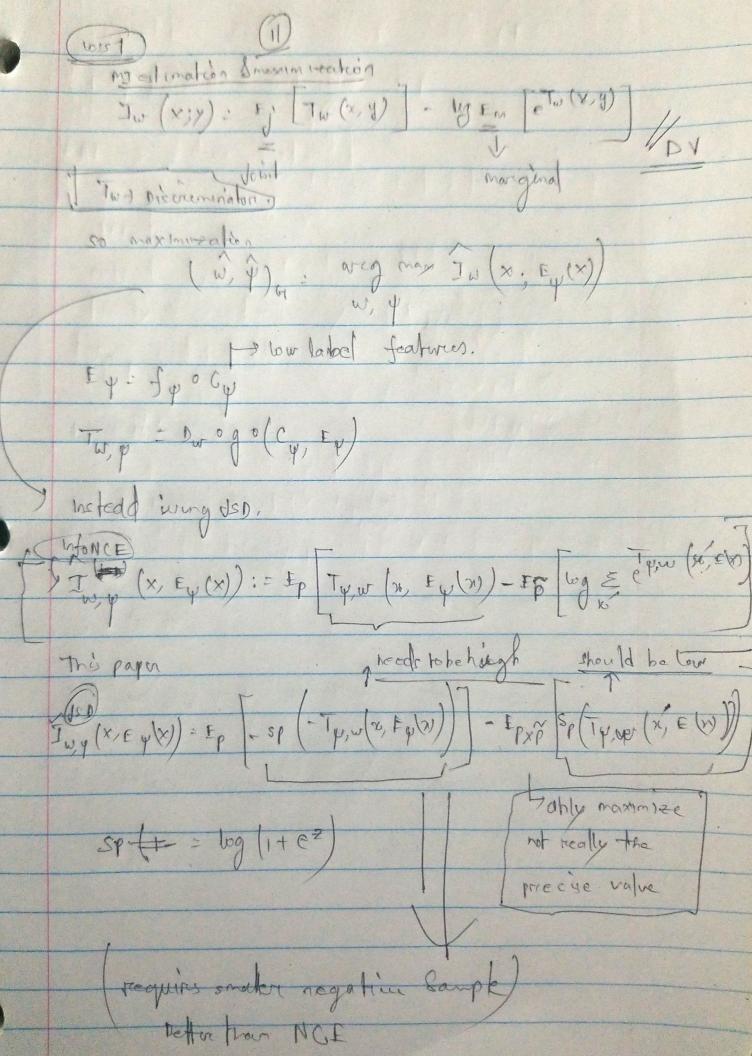
(Deep Infomor): Contractive Sotup! MAP -> foture vector input 20 outrut y family of encoder: Ey = { Eyy} y = Y

V, , distribution over encoding.

for input X. Torget: Jon some ispirt O maximize: I(X, Ey(X)) (MI) @ constraint: Up, p match V Houther proon distribution (infomax) 1 Figure (3) mother of all it (global vs local) So, positive & Negative Samples!



Local mt maximization feature map

Cyly: {Cyly: {Cyly: 1 Eq(x) = fq0 (4 (0) $(\hat{\omega}, \hat{\psi})_{L} = \text{weg more} \frac{1}{m^2} \sum_{i=1}^{m} \hat{T}_{i,y} \left(c_{\psi}^{(i)}(x); \hat{\tau}_{\psi}(x) \right)$ matching respecientation with propore (w) p) = weg min oveg max D (VII U 4) P) = Fy [wg Dd (4)] + Ep [cod (1- od (Eq(w))) Adversarion Auto encoder. final loss weighted rum of the prior tour three