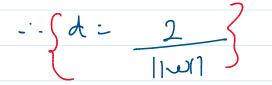
Wednesday, February 23, 2022 2:05 PM Adding a to no will ered to print a zo in th, d - scalar (convert to vector) :. 20 = 20 + d. 10 []

20 is a frint, .. w 20 +b=1 -0 ~ ω η ο + d. ω + b = 1

ω η ο + d. ω,ω + b = 1 wro + & 11w[12 + b = 1 wn, + 1/w1/ +6=1 wno +b + d | w| = 1

-1 + d/10/1=1



to monimise the margin, we have to choose 11 with snewert /WI/

Objective function minimize IIVII subject to the condit. Her all tre surprise are above 11, of -ve surprise are below

S.t., 60 n; +6>, 1 + n; E + ve class (W w n; +6 < -1 + n; E - vc 1) Min WII

5.f. y. (wn, 16) > | (xr y; -1, y; (wn, 16) > 1 1 (wn, 15) > 1 M/n 116/1

for g:=-1,-(\omega,16)>1 = . \omega,16)>1

obj. for is min | | v| 1 s.t. y; (warts) > 1 +i

I will is not a conven fur. I so it loads to local minimum

minimising II of is equired ont to minimising 1 1 WII2

Quadratic Bjfmr.

cowen a licential.

cower a differentiable

: Convert to dual from

If who have to be vin

24 - 0 and 24 - 0

36

:. i) dL _ 1:-20 - 2 «;y;n; +0 =0

 $-) \quad \omega = \sum_{i \geq 1}^{N} \alpha_i y_i n_i - 2$

Oftimal co is a linear combo of mainingen, scaled by of

The three control of the control of
Oftimal co is a linear compos of maining en. scaled by of
11) DL = - \(\int \times \) \(
=) = T; y; =0 -3
All Lagrange. Multiplier ofon the class should be = Lrs for-ve class
Chick class recording for DN LAB etc.