



HALVED NN FUNCTION PREDICTION

APRIL 2020

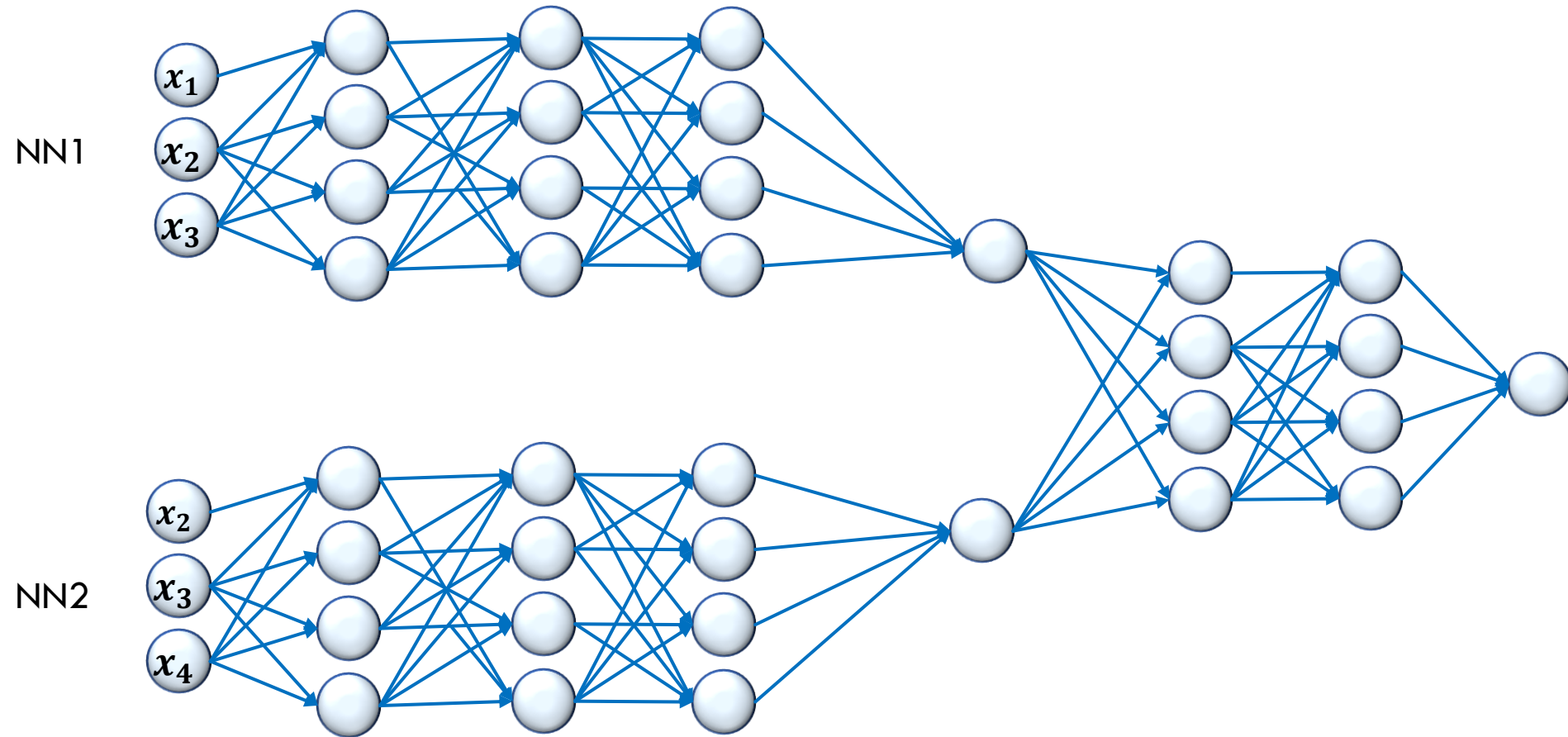
YUVAL ALFASSI



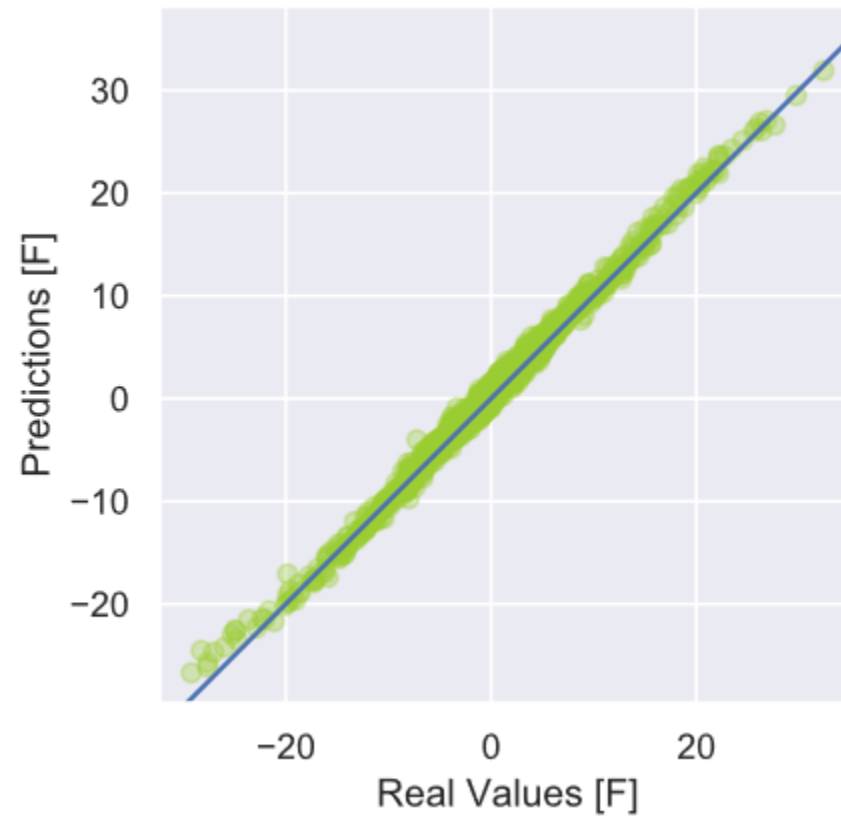
PREDICTED FUNCTION

$$F(x_1, x_2, x_3, x_4) = \left((x_1 + x_2)^2 + (x_2 + x_3)^2 \right)^2 - \left((x_2 + x_3)^2 + (x_3 + x_4)^2 \right)^2$$

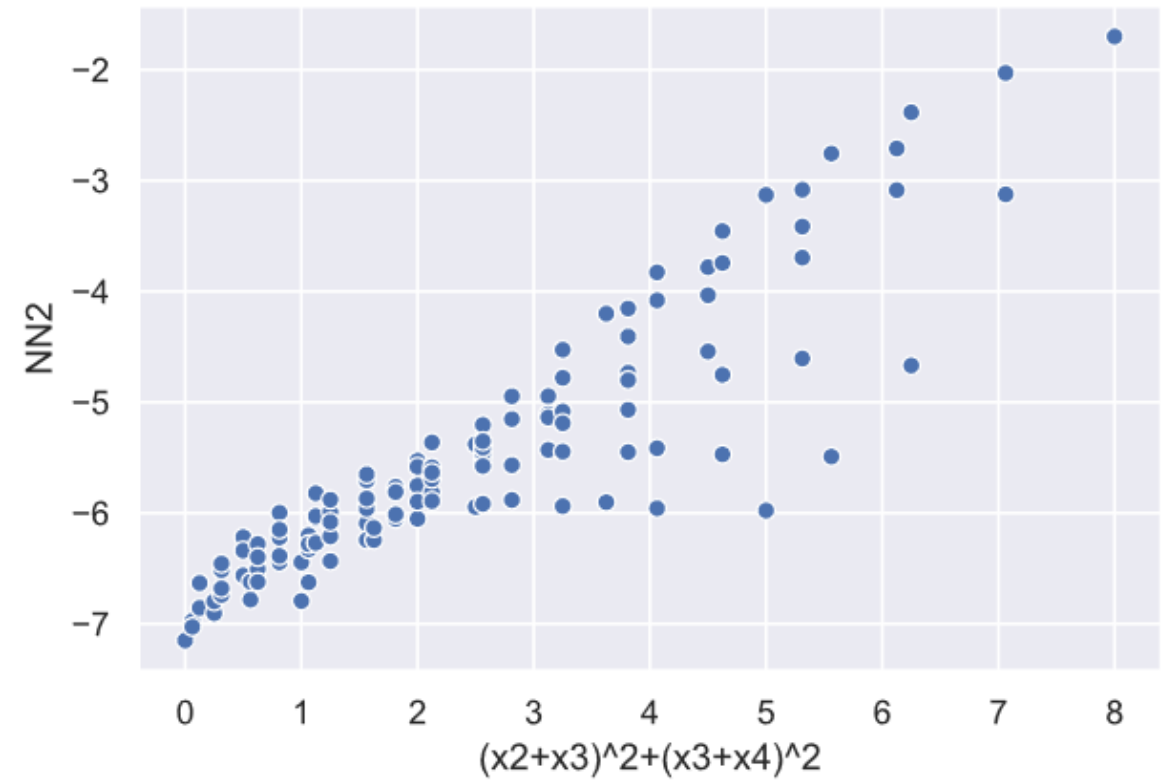
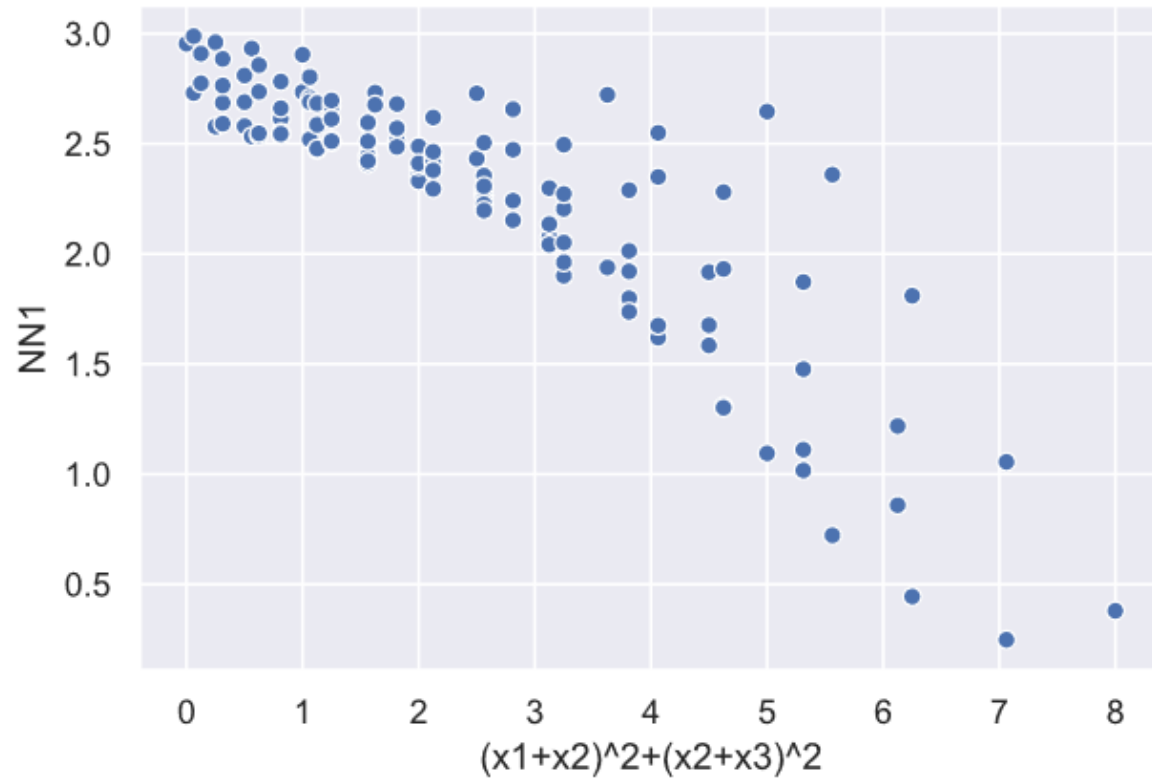
NN STRUCTURE



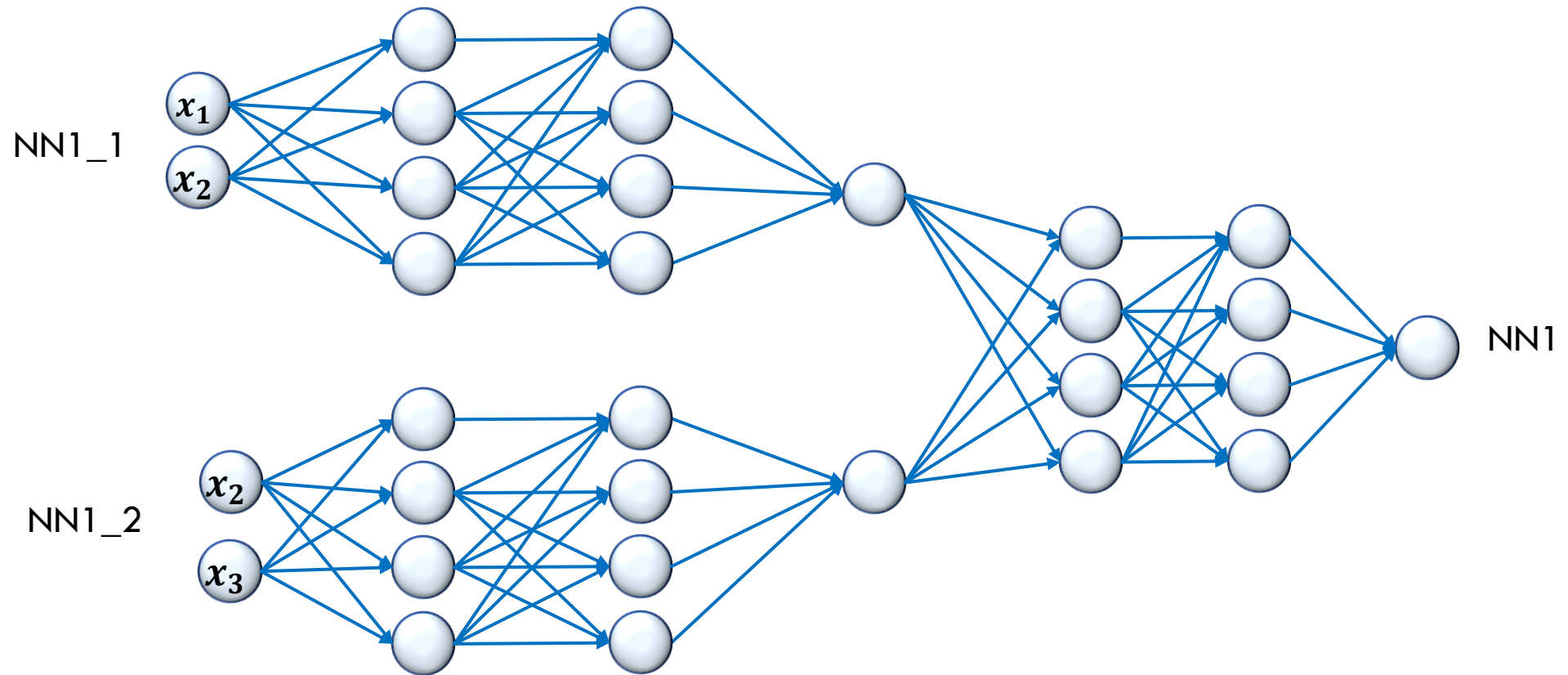
$$\text{MSE} = 0.5$$



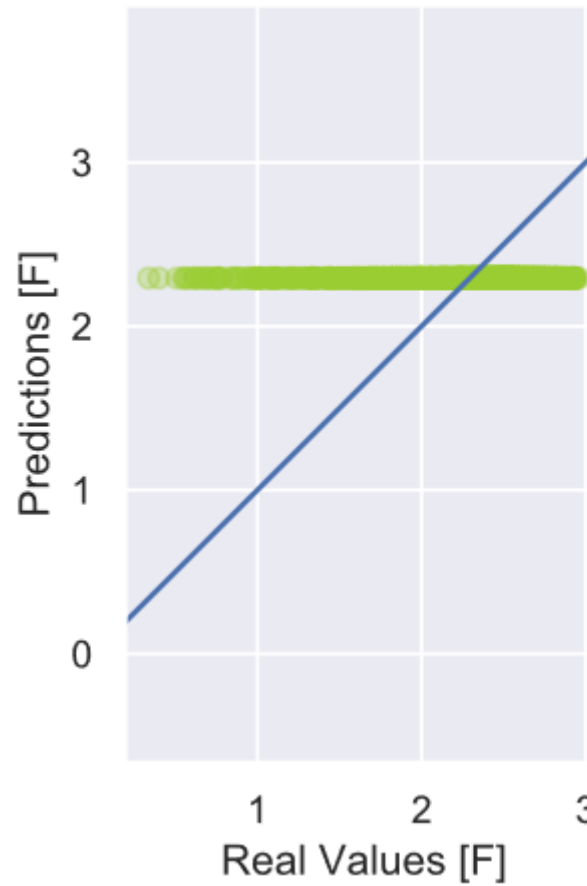
NN1 & NN2 PREDICTIONS



HALVING NN1



NN1: DOES NOT CONVERGE



NN2: DOES NOT CONVERGE

