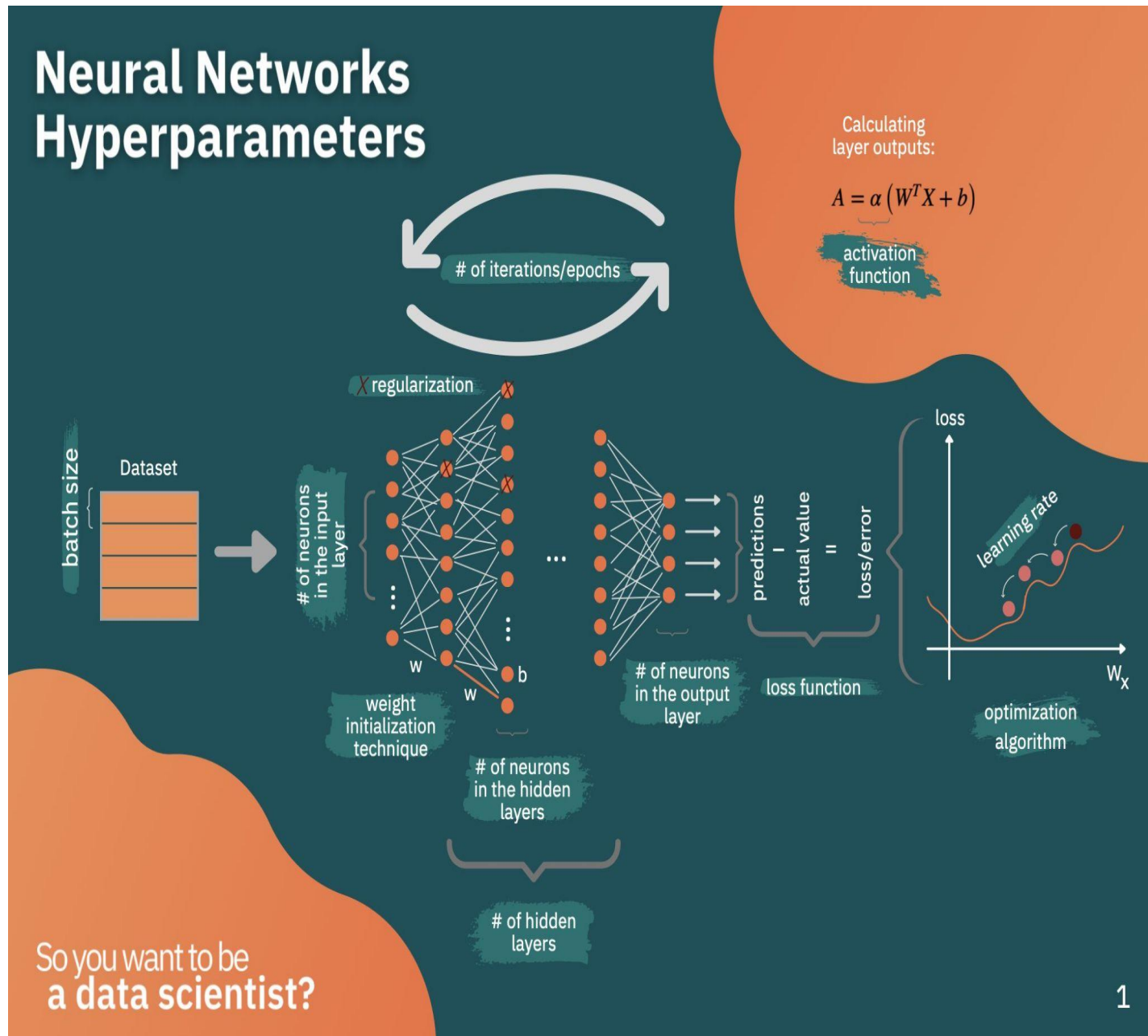


## ■ Hyperparameters of a neural network :-

# Neural Networks Hyperparameters



- Mathi ko picture maa neural network kaa lagbhag sabai hyperparameters haru mention gariyeka xan .
- Hamro dataset lai sano sano groups i.e batches maa convert garinxa ani tyo each batches maa kati dataset xan vanni kura batch size le denote garxa.
- Suru maa hami sanga data hunxa, tyo dataset lai hamle small batches maa convert garxau ani neural network ko input maa pathayinx.
- Then tini input bata predictions haru niskinx,ani predicted values ko actual values haru hami sanga suru mai hunxa , jusbata each prediction ko error nikalinx.
- Ani hamro main objective vaneko tyo error ghatauni jasko lagi hamle different optimization algorithms (like **gradient descent** ) haru use garinx.
- Aba **optimization algorithm** le kun kun parameters le **error / loss** ma kattiko effect gareko xa tyo calculation gardai back propagate garxa to adjust the parameters (i.e weight haru update garxa) jastle garda error / loss kam hos. Ani yo process lai **Back propagation** vanninx.

- Weight update garxa ani next batch ko data lai input ko rup maa dinxa ani same process chalirakhxa.
- Ani hamle purai batch ko lagi yo operation sakkyo vane it would be one **Epoch**