Malam Machine Learning
Computer Engineering School

Layer di Deep Learning

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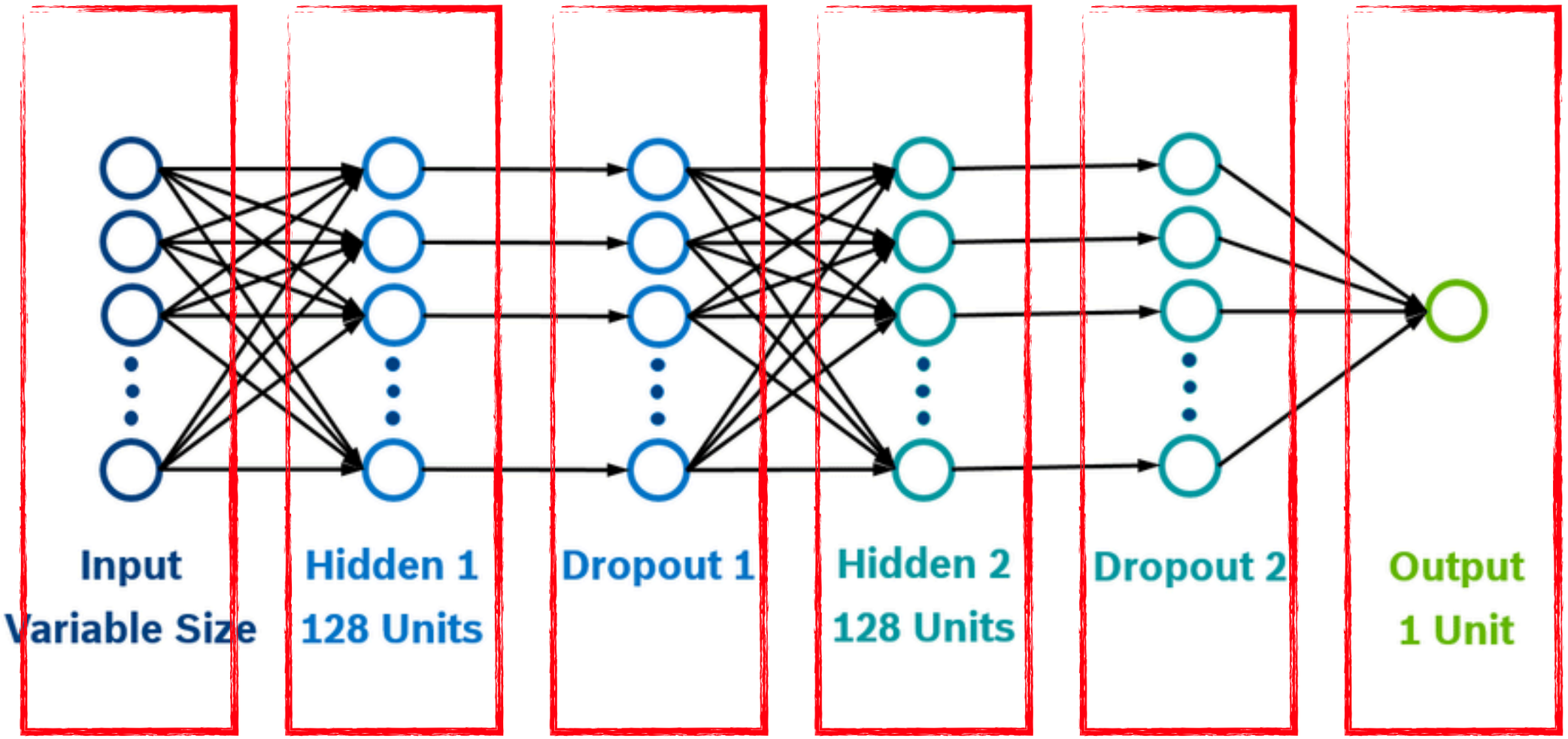
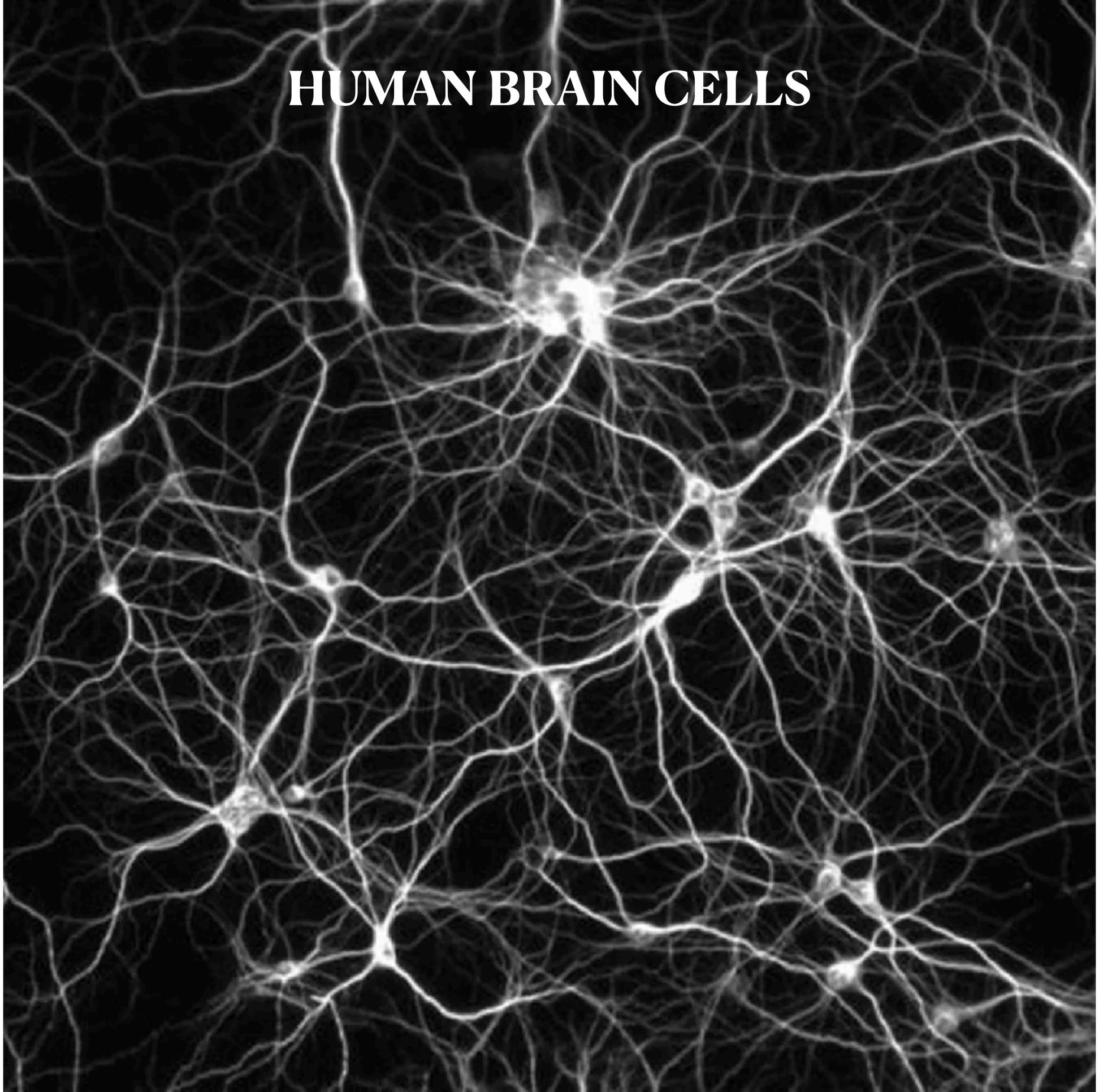
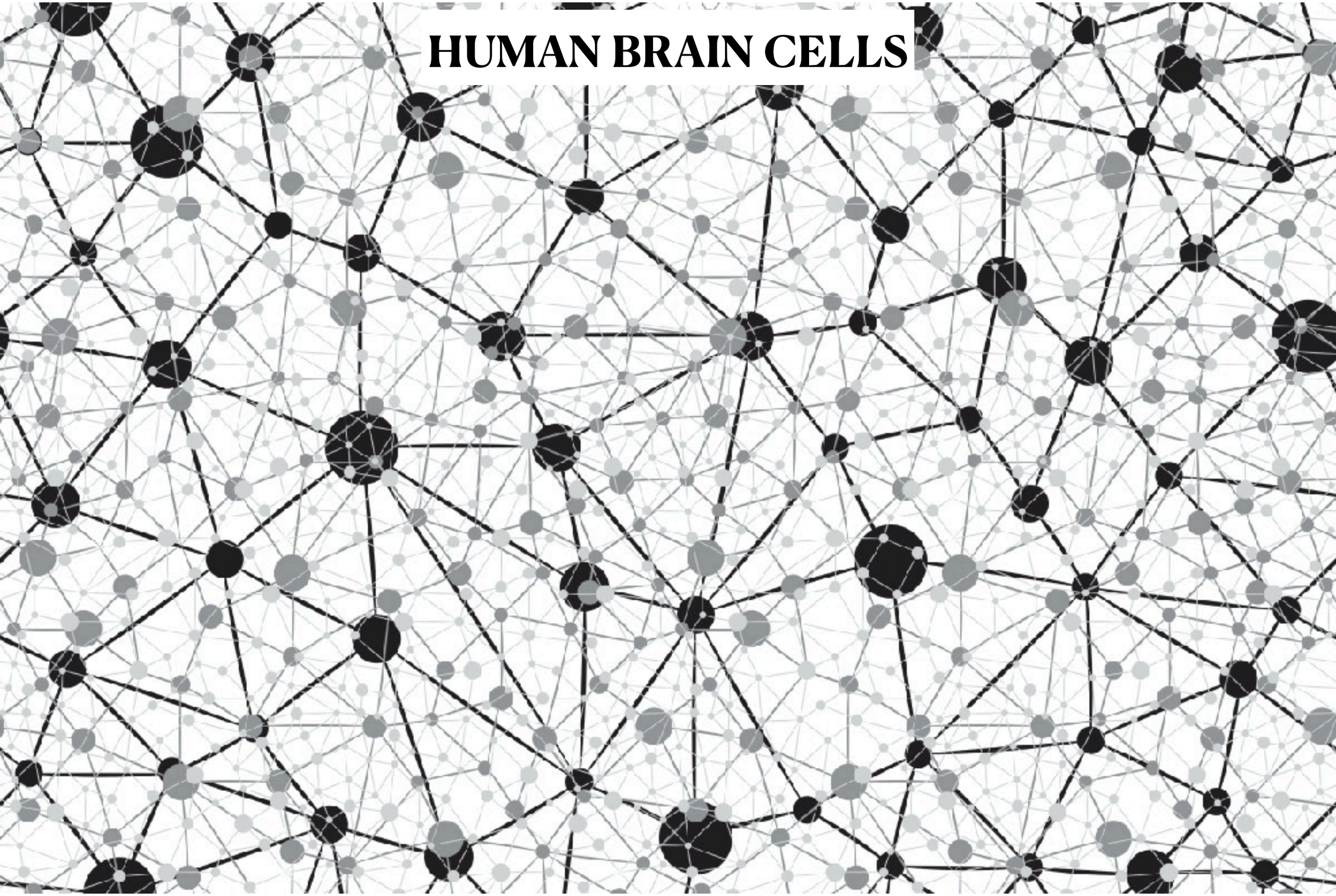
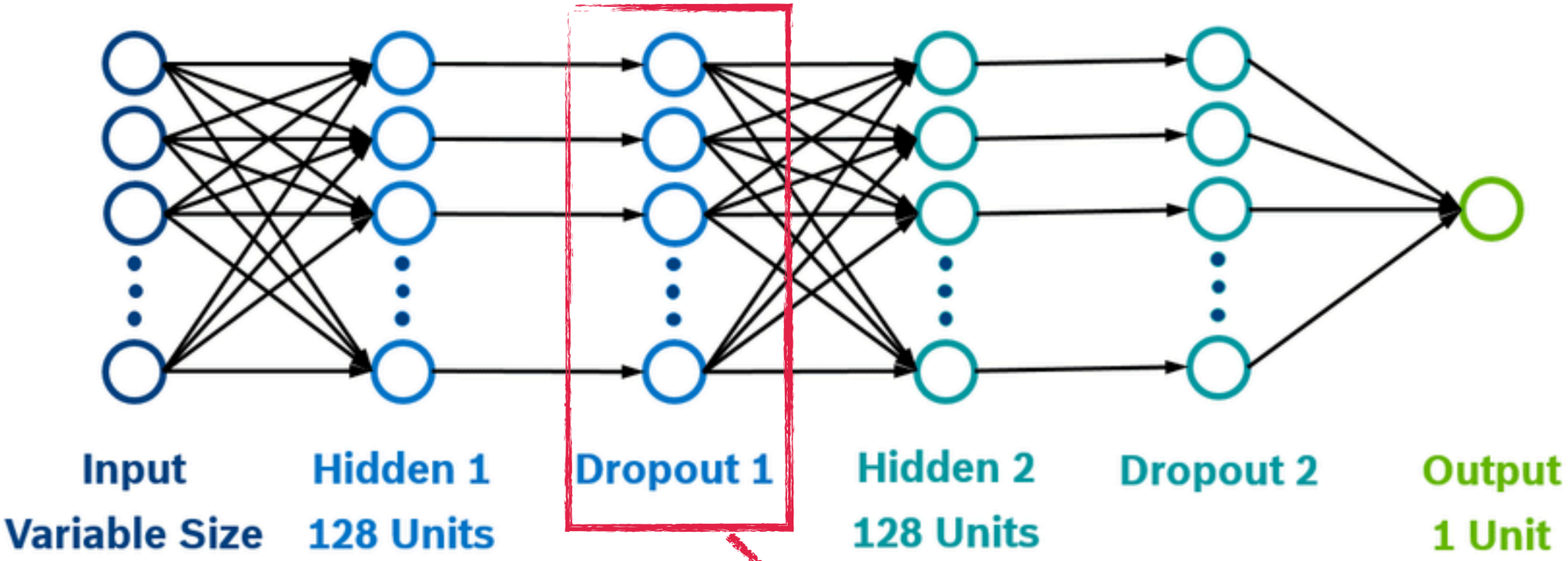
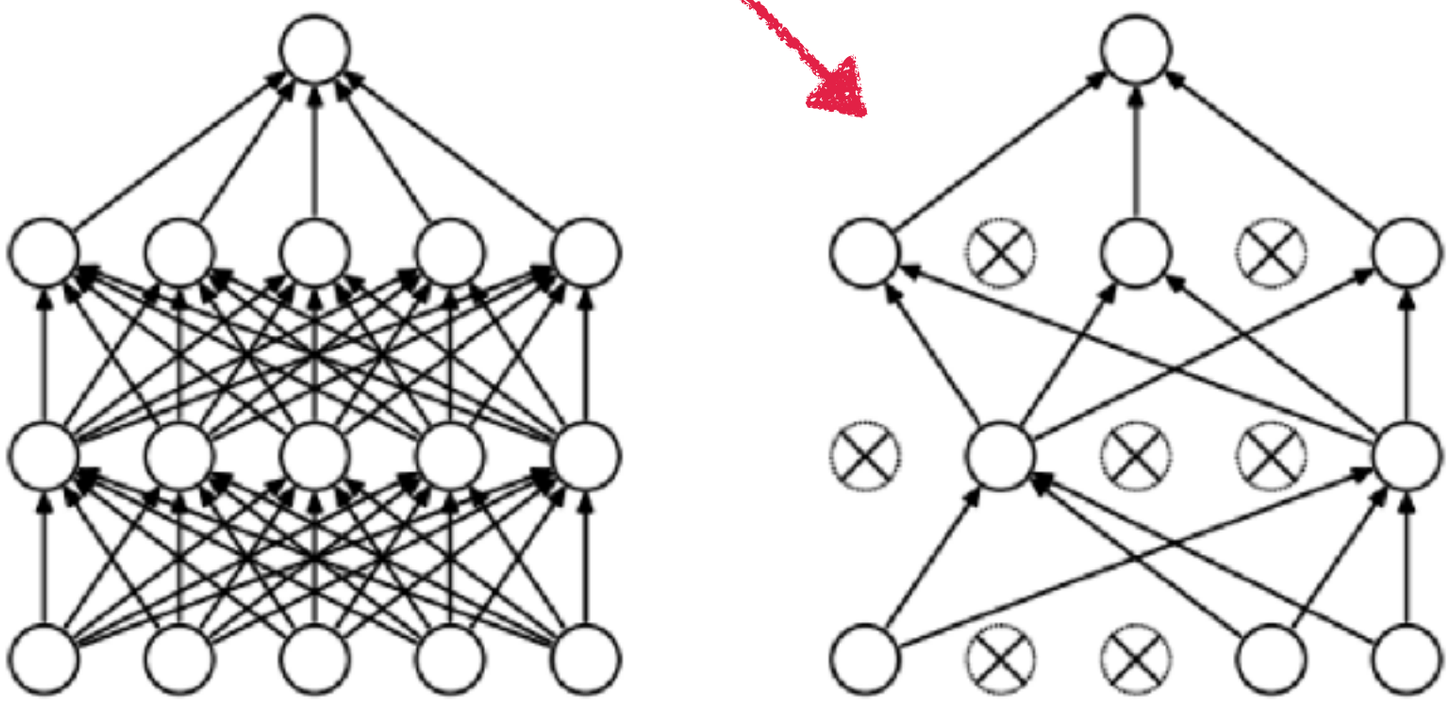

Input
Variable Size
Hidden 1
128 Units
Dropout 1
Hidden 2
128 Units
Dropout 2
Output
1 Unit


HUMAN BRAIN CELLS

HUMAN BRAIN CELLS



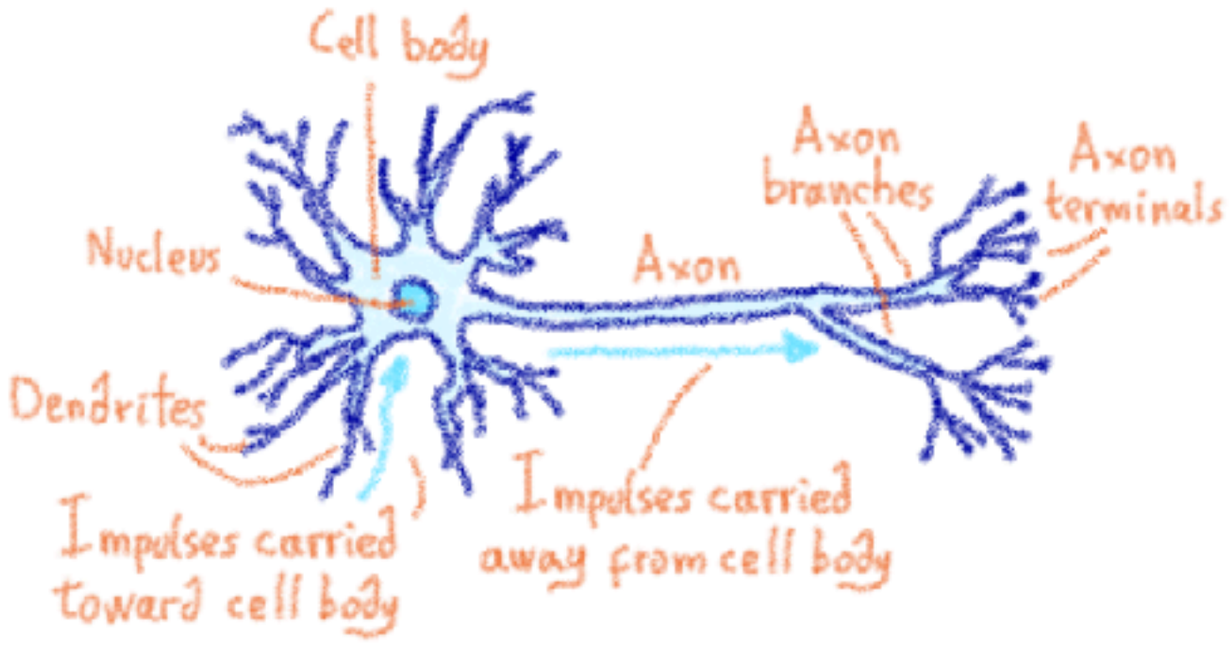




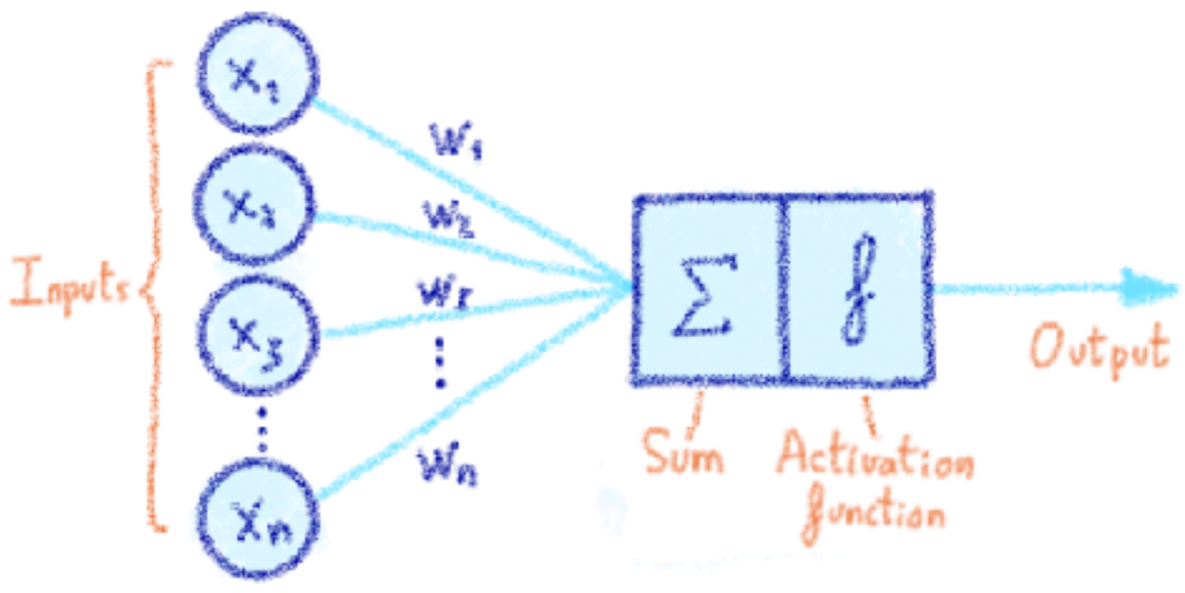
(a) Standard Neural Net

(b) After applying dropout.

Biological Neuron



Artificial Neuron



OVHcloud

Macam-Macam Layer

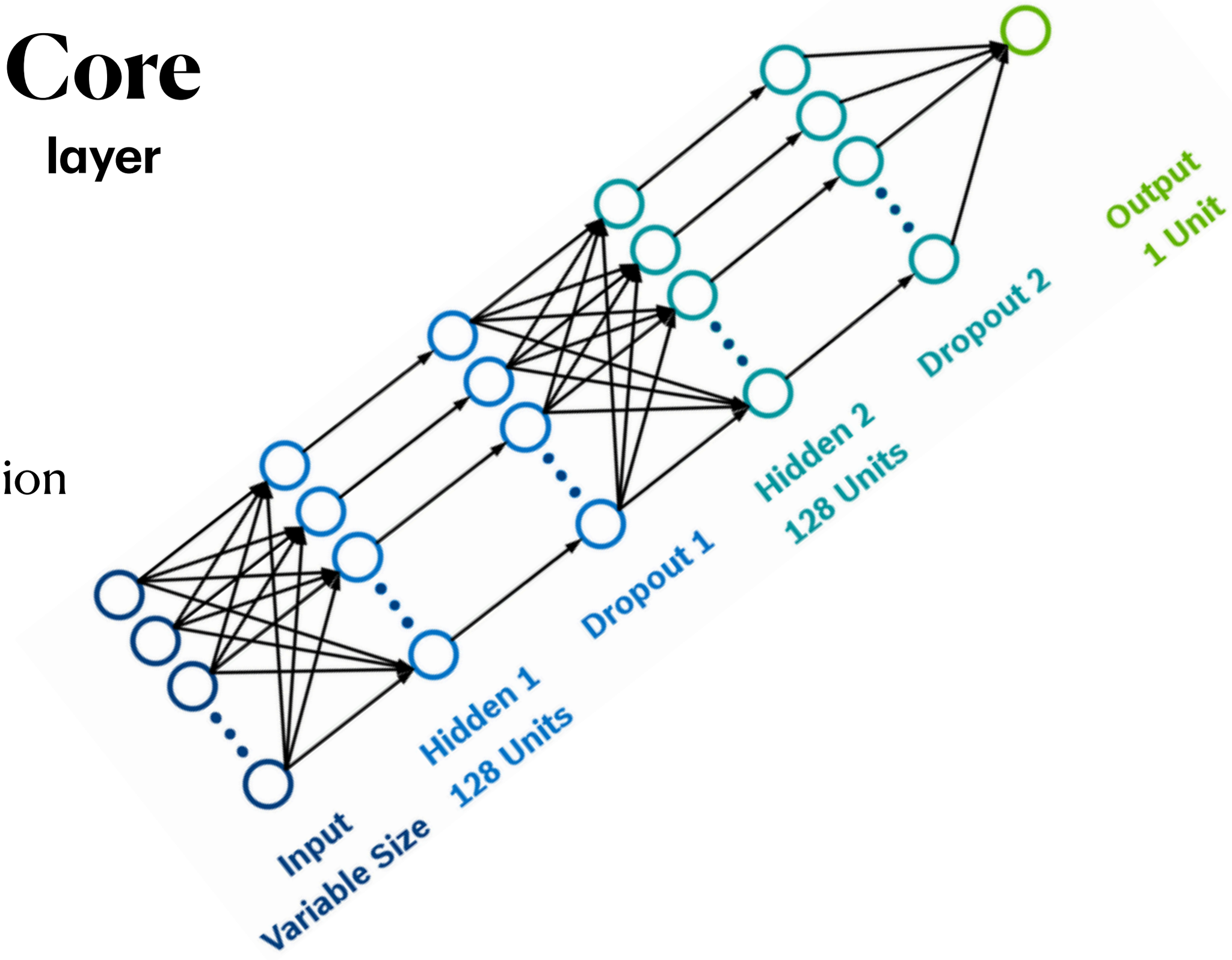
Berdasarkan Kategorinya (top 3)

- Core
  - Input
  - Dense
  - Activation
- Convolution
  - Conv1D
  - Conv2D
  - Conv3D
- Recurrent
  - GRU
  - LSTM

Core

layer

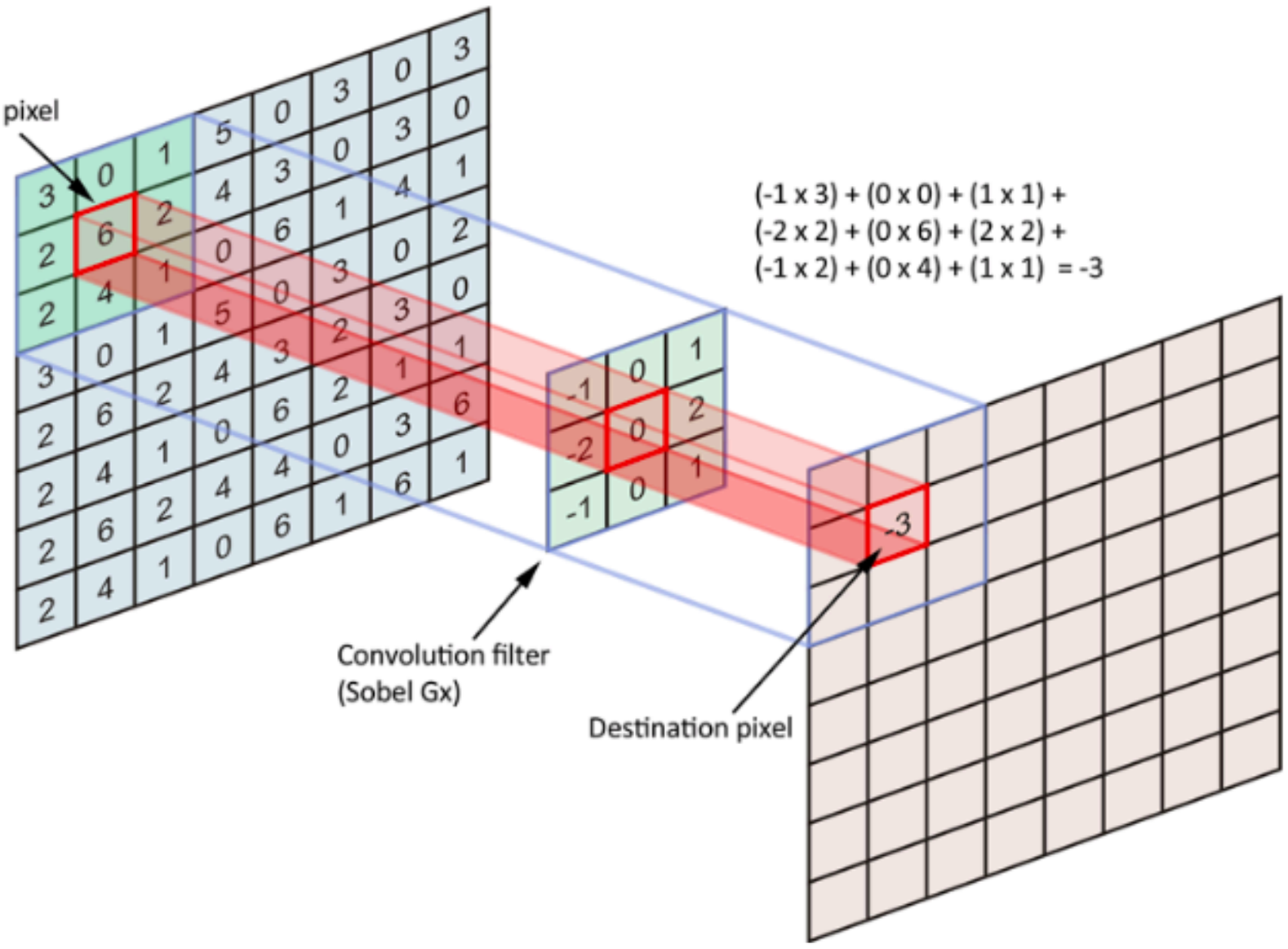
- Input
- Dense
- Activation



Convolution

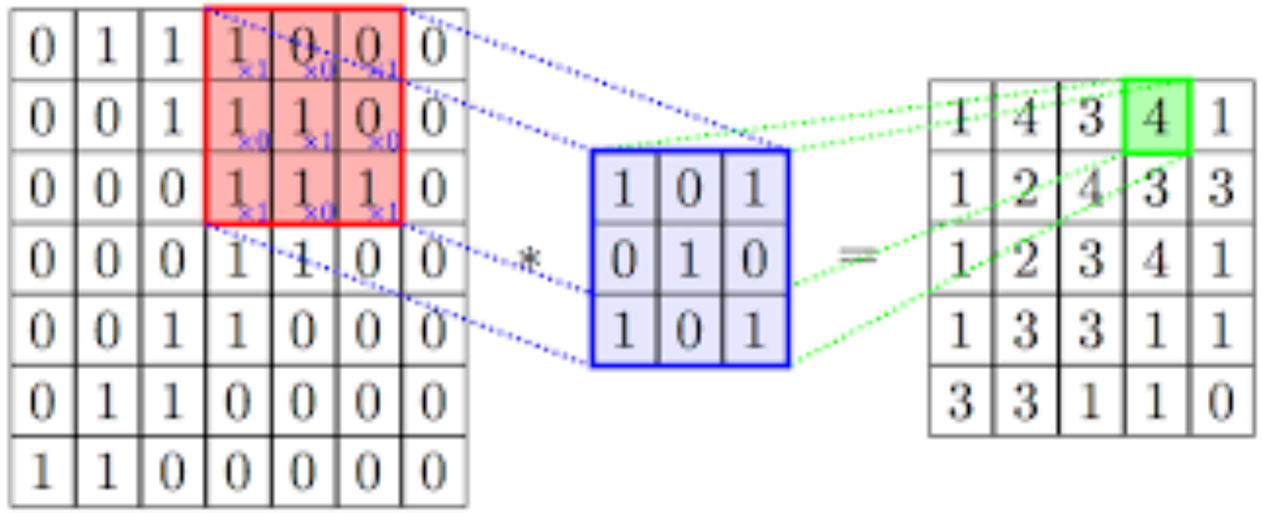
layer

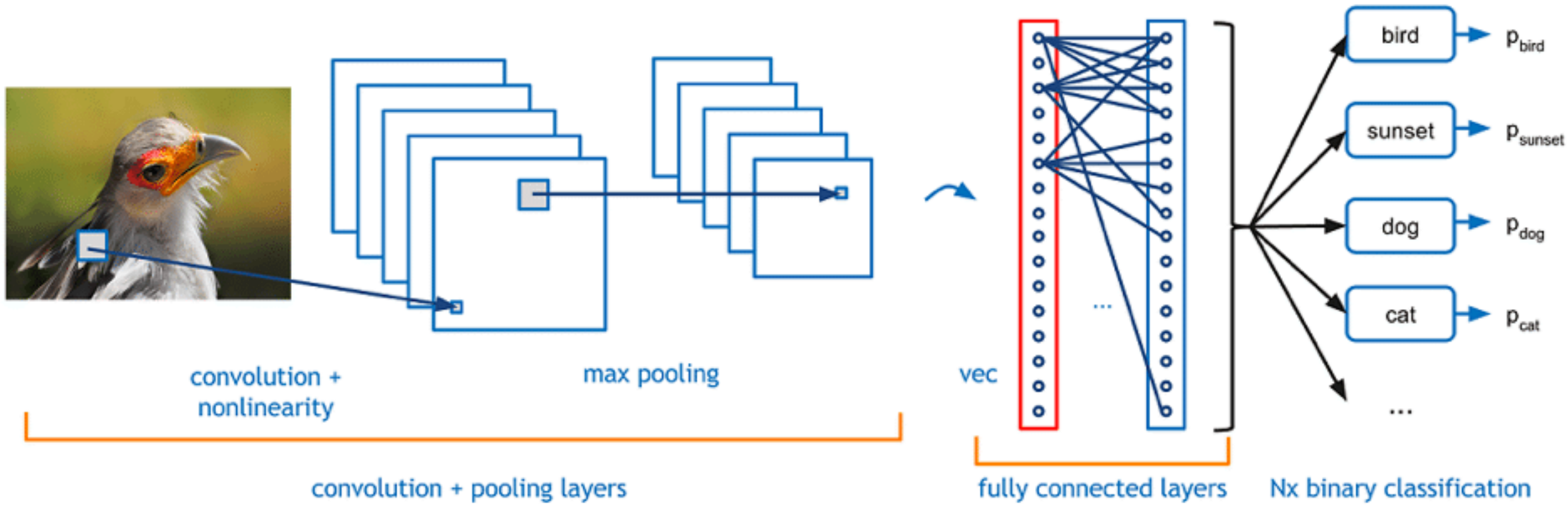
- Conv1D
- Conv2D
- Conv3D



Convolution

layer

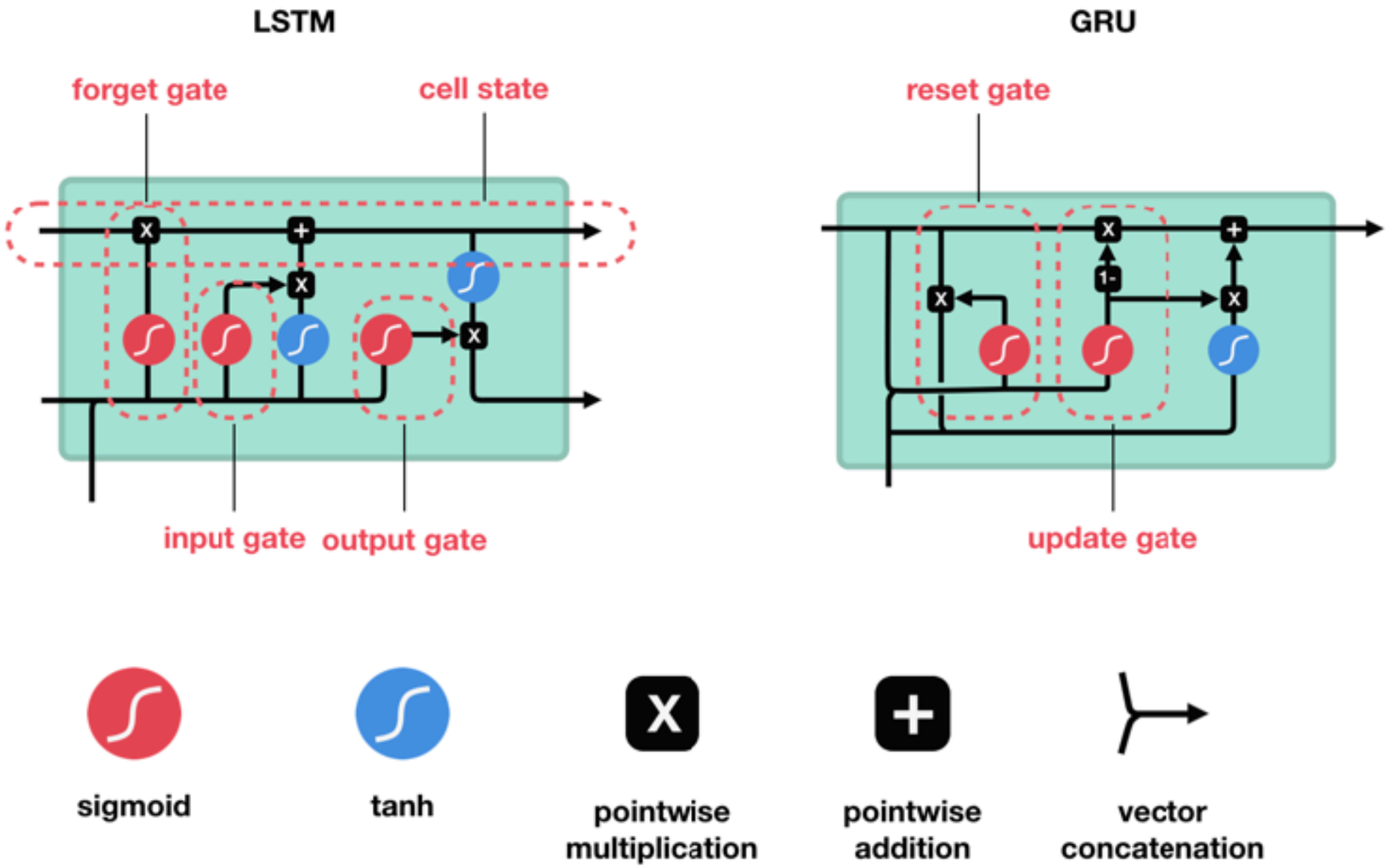




RECURRENT

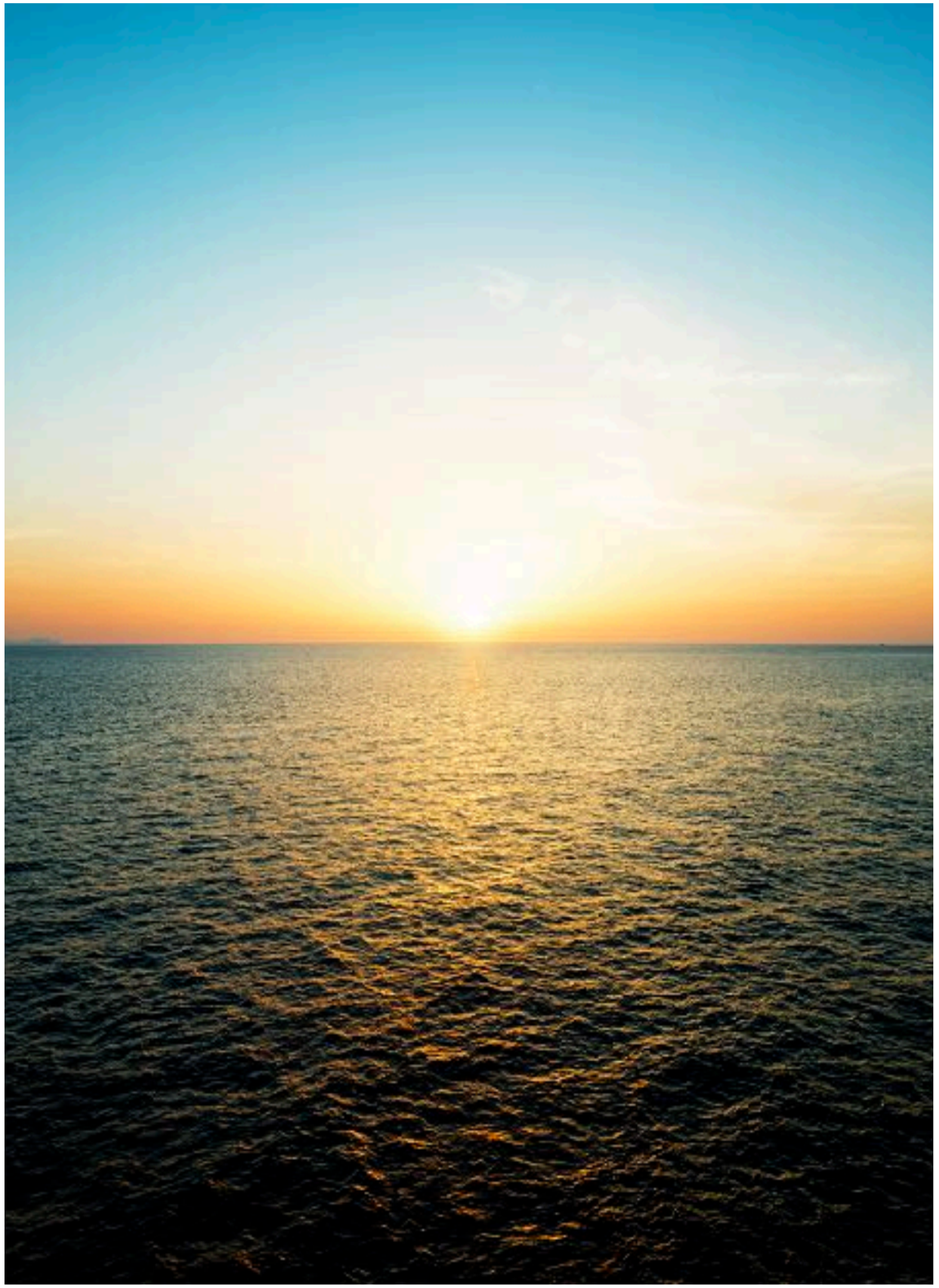
layer

- GRU
- LSTM



RECURRENT MOSTLY USED IN

- Regression.
- Natural Language Processing (NLP).
- Music Modeling.
- Language Translation.
- Speech Recognition



REFERENCES

- https://towardsdatascience.com/illustrated-guide-to-lstms-and-gru-s-a-step-by-step-explanation-44e9eb85bf21
- Backpropagation: https://www.youtube.com/watch?v=Ilg3gGewQ5U