

Generalities on Deep Learning

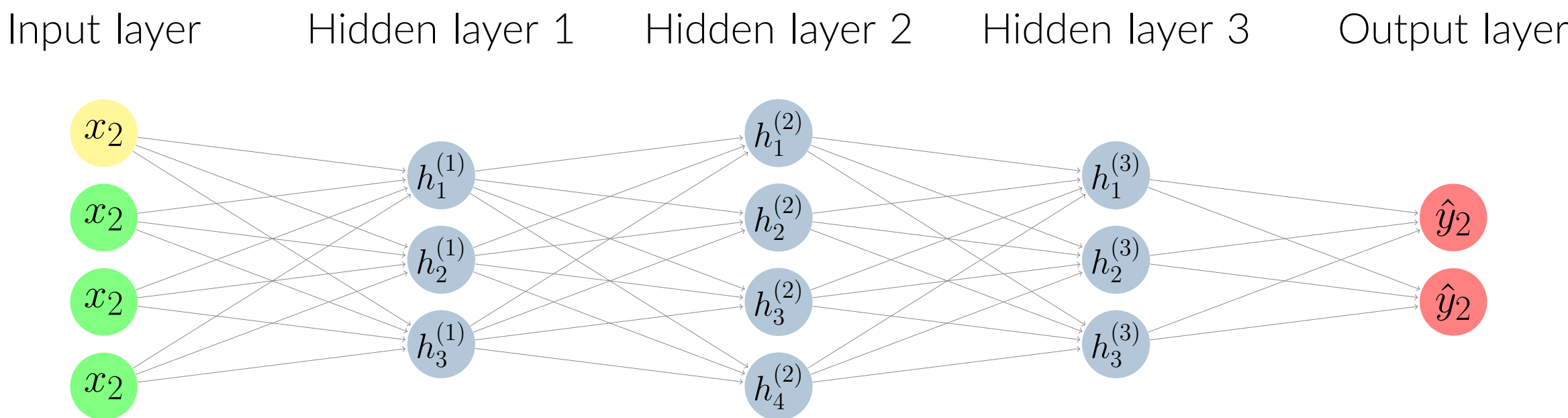


Figure 1. Example of a *feedforward* neural network. Each layer is a tensor operation taking f_i the previous layer output tensor as input. The final function $f(\boldsymbol{x}) = f^{(3)}\left(f^{(2)}\left(f^{(1)}(\boldsymbol{x})\right)\right)$ is the composition of the tensor operations.

[1] illustrates this.

Tensor Networks on nbody quantum problem

DL/nbody coupling

Fractality

Hamiltonian

Perspectives

References

[1] Ian Goodfellow, Yoshua Bengio, and Aaron Courville. *Deep learning*. MIT press, 2016.