



**Algorithms**

- Linear regression
  - $y = mx + b$  for simple linear regression
  - $y = m_1x_1 + m_2x_2 + \dots + b$  for multiple linear regression
  - $x$  is projected onto a new space in partial least squares regression

- Neural networks
  - sets of nodes that transform inputs into an output
  - allows for nonlinear relationships.

- Deep learning
  - neural networks with multiple layers
  - increasingly popular and powerful with faster computers and larger datasets

Not an exhaustive list!



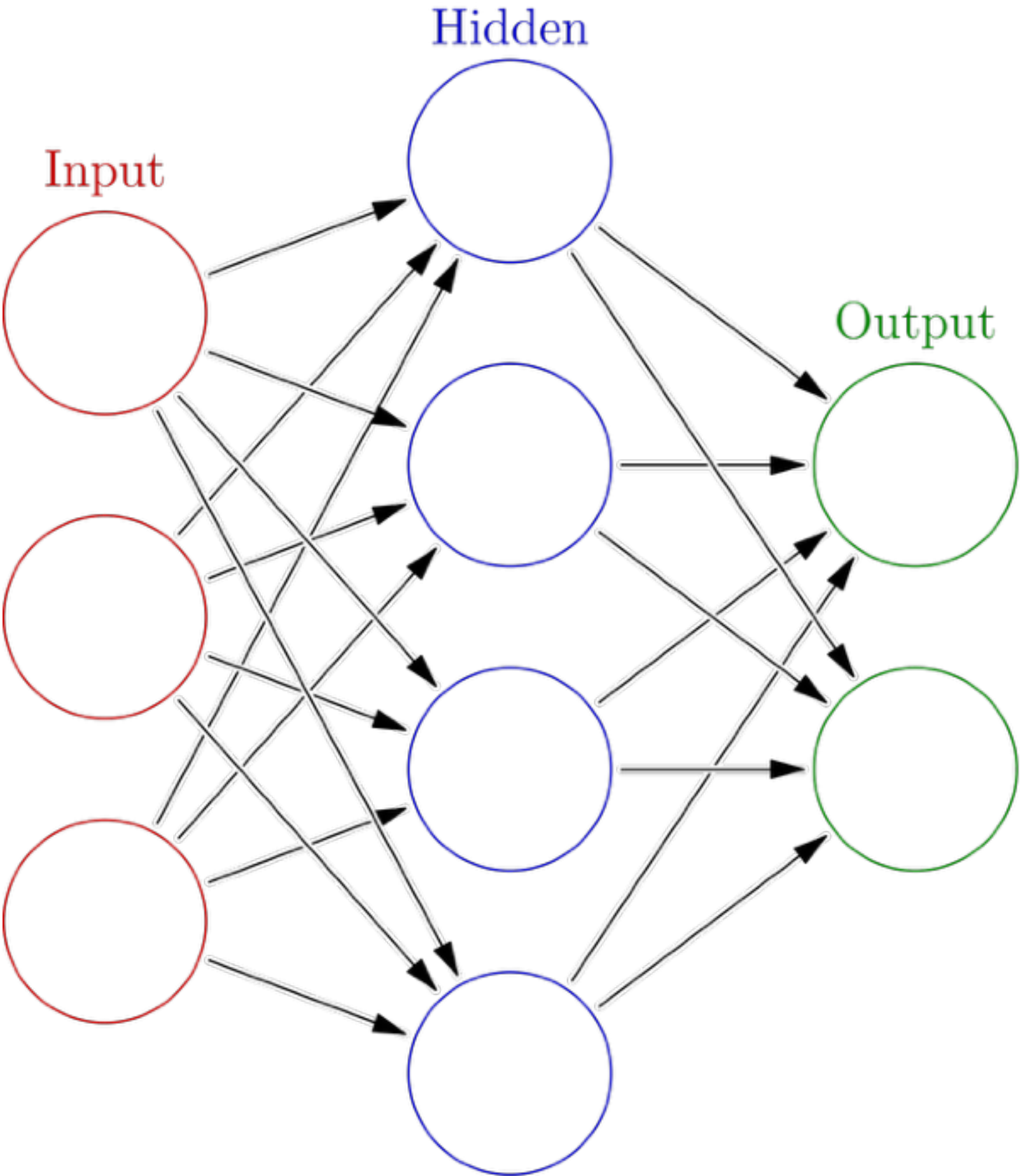


Diagram of an artificial neural network [2]



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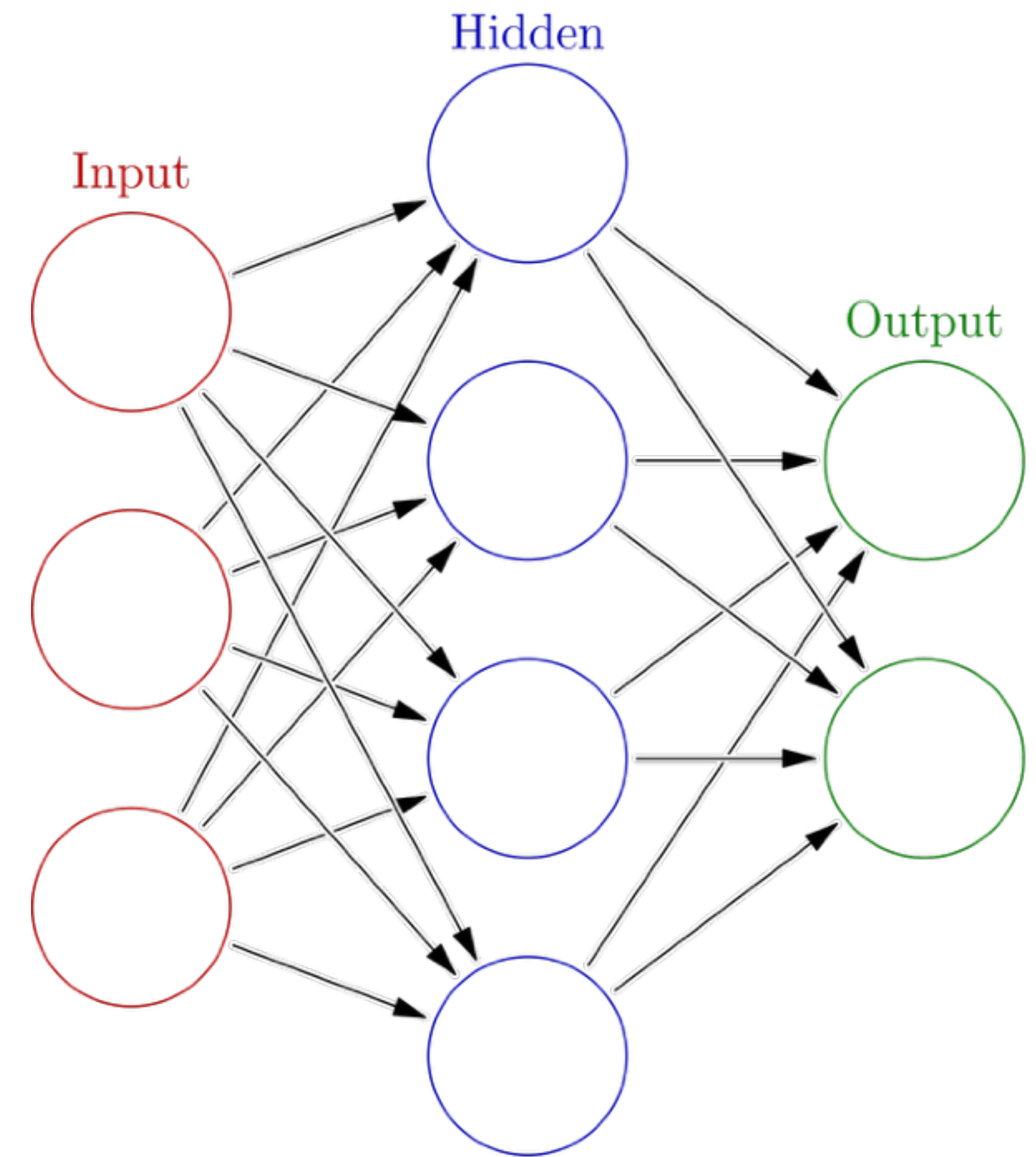


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# Validation