Artificial Neural Networks

Classification

Deep Learning Pre-Work

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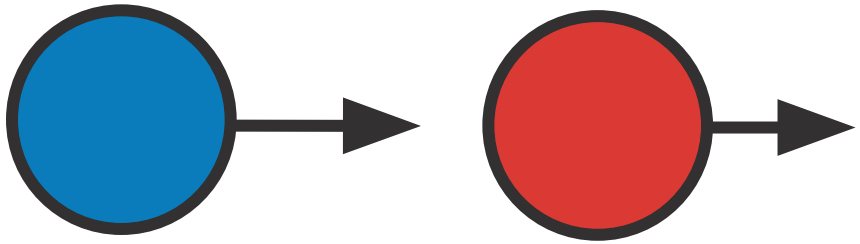
Example



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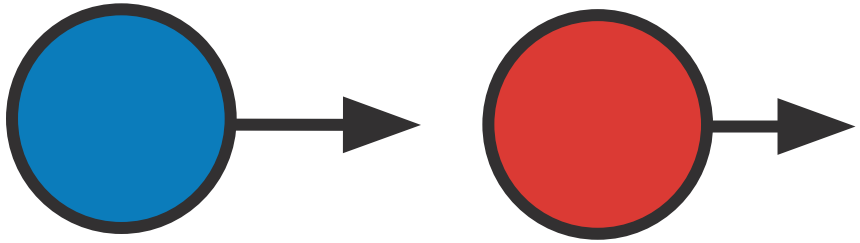

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Example

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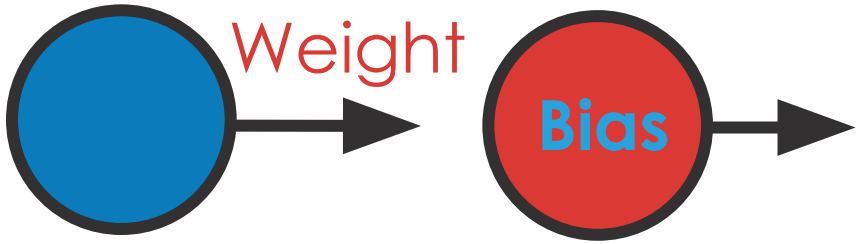

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Equation

X*Weight + Bias

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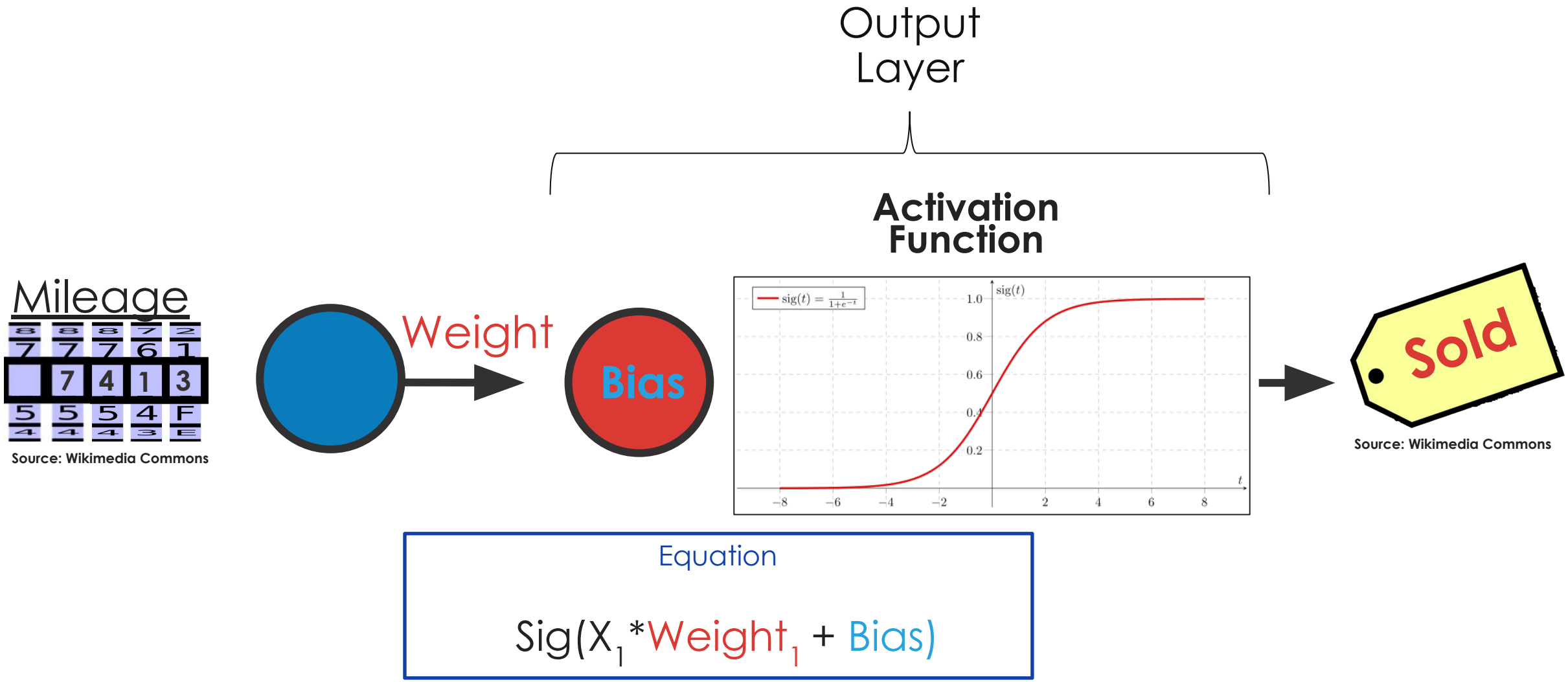
Sigmoid Activation Function



Equation

$$Sig(X_1 * Weight_1 + Bias)$$

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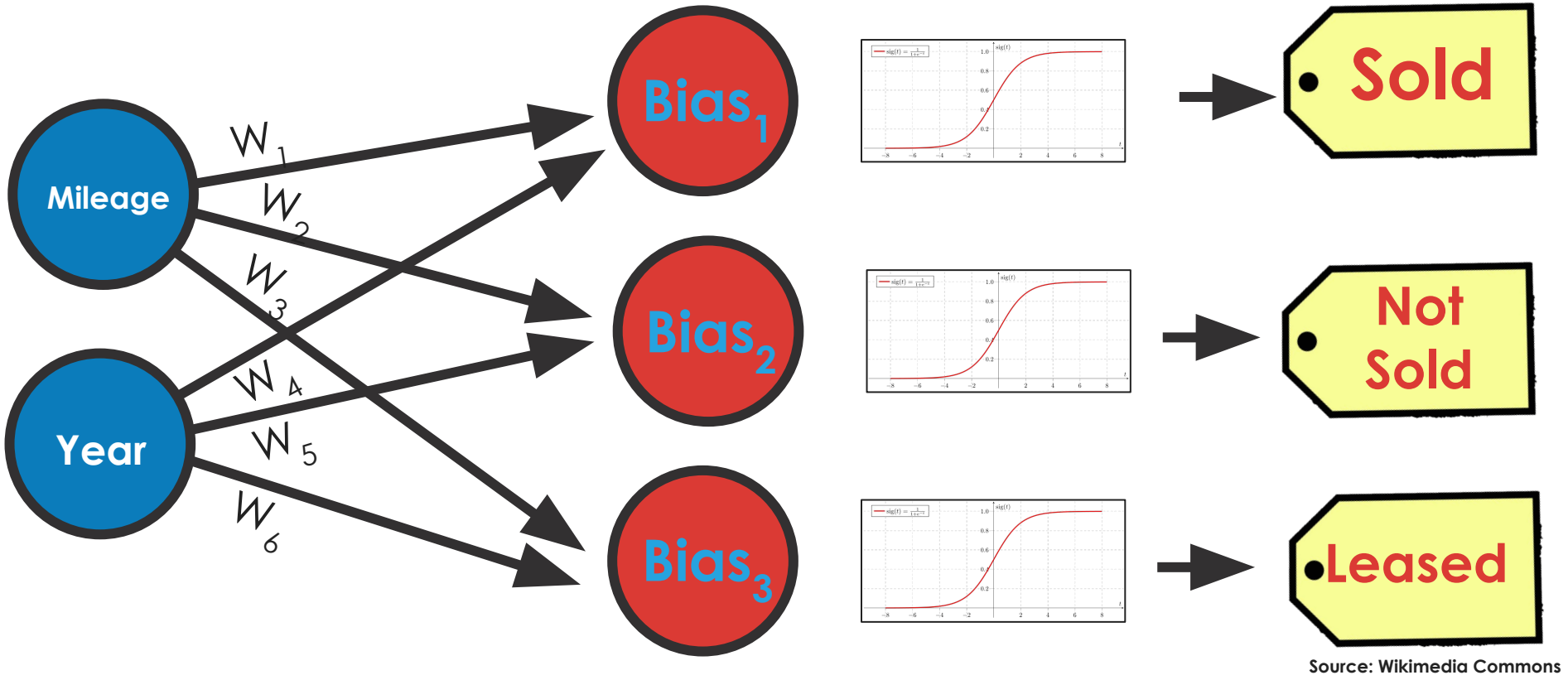
Multiclass Outcome



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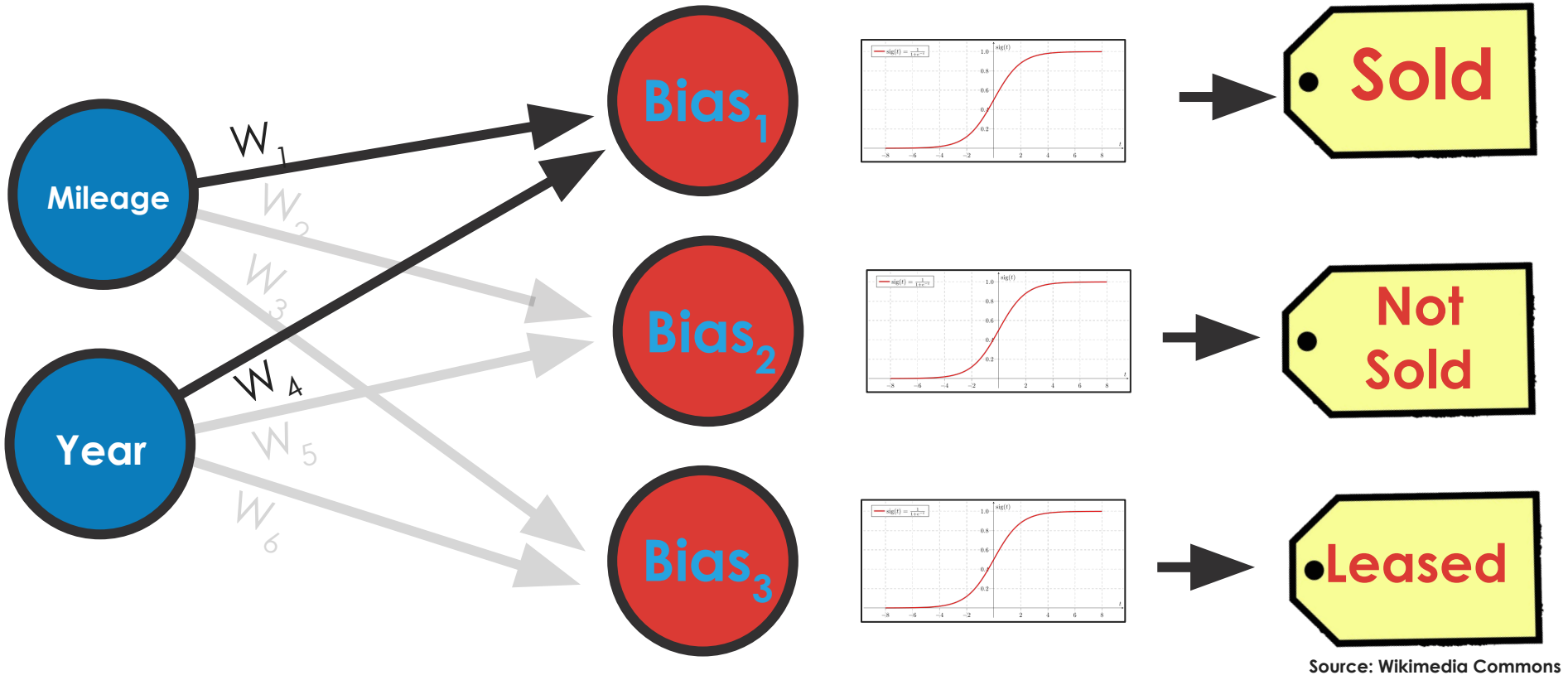
Multiclass Outcome



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Equation

$Sig(X_1 * W_1 + X_2 * W_4 + Bias_1)$

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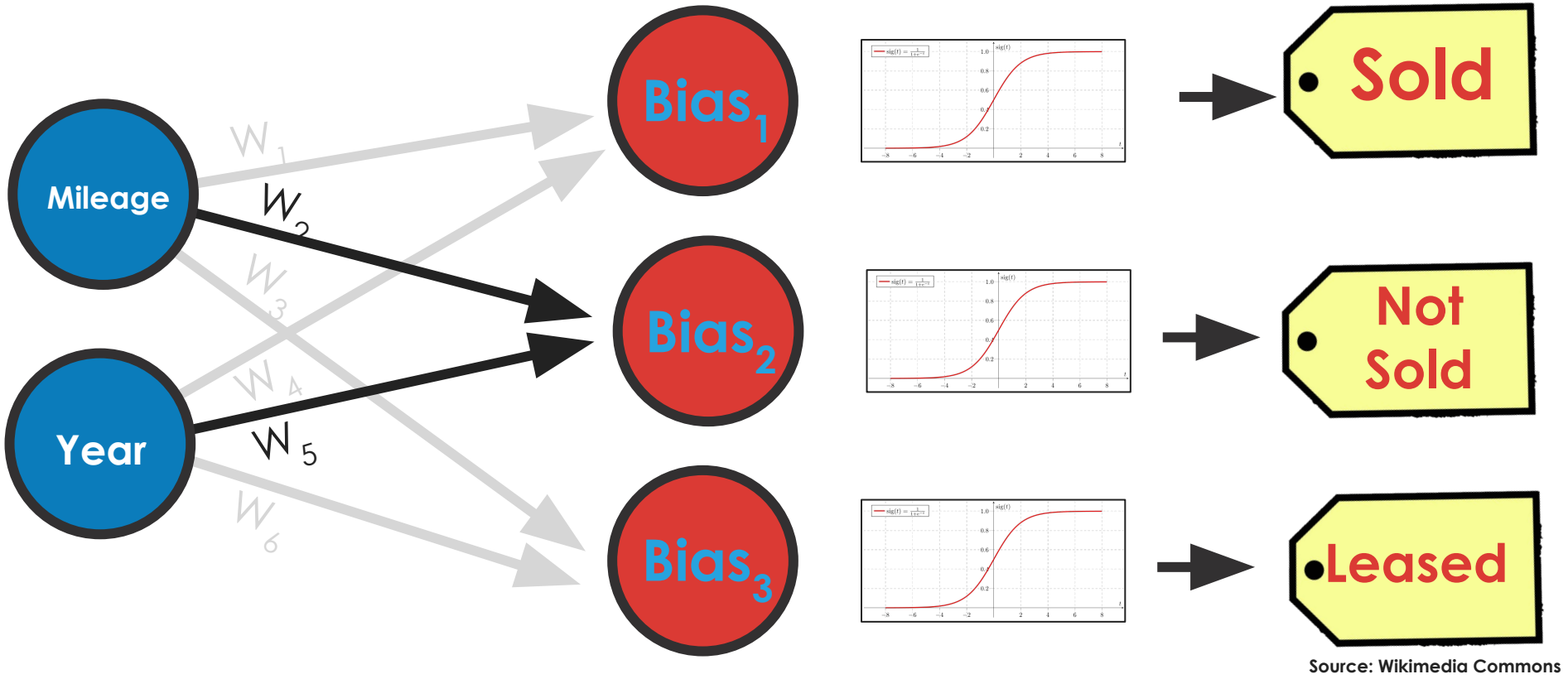
Multiclass Outcome



Source: Wikimedia Commons

Equation

$Sig(X_1*W_1 + X_2*W_4 + Bias_1)$

Equation

$Sig(X_1*W_2 + X_2*W_5 + Bias_2)$

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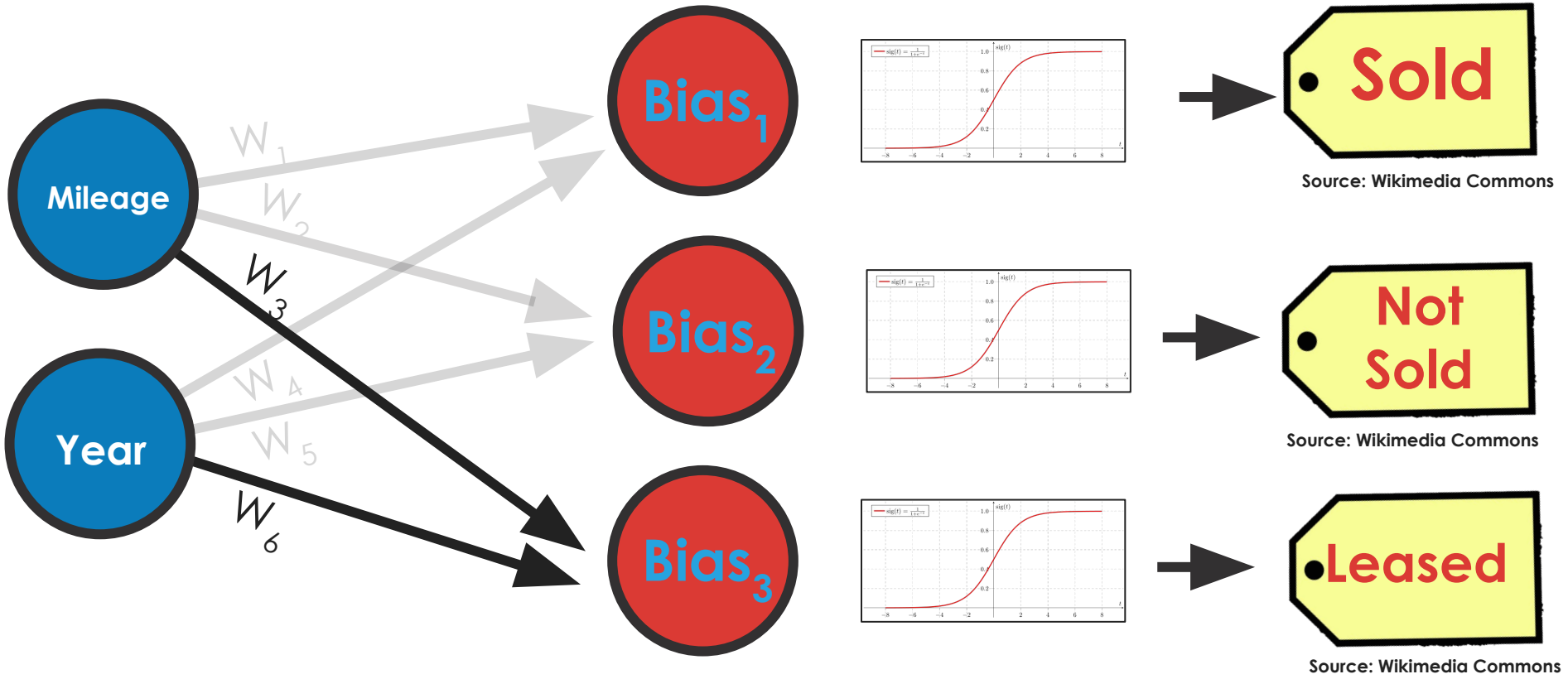
Multiclass Outcome



Equation

$Sig(X_1*W_1 + X_2*W_4 + Bias_1)$

Equation

$Sig(X_1*W_2 + X_2*W_5 + Bias_2)$

Equation

$Sig(X_1*W_3 + X_2*W_6 + Bias_3)$

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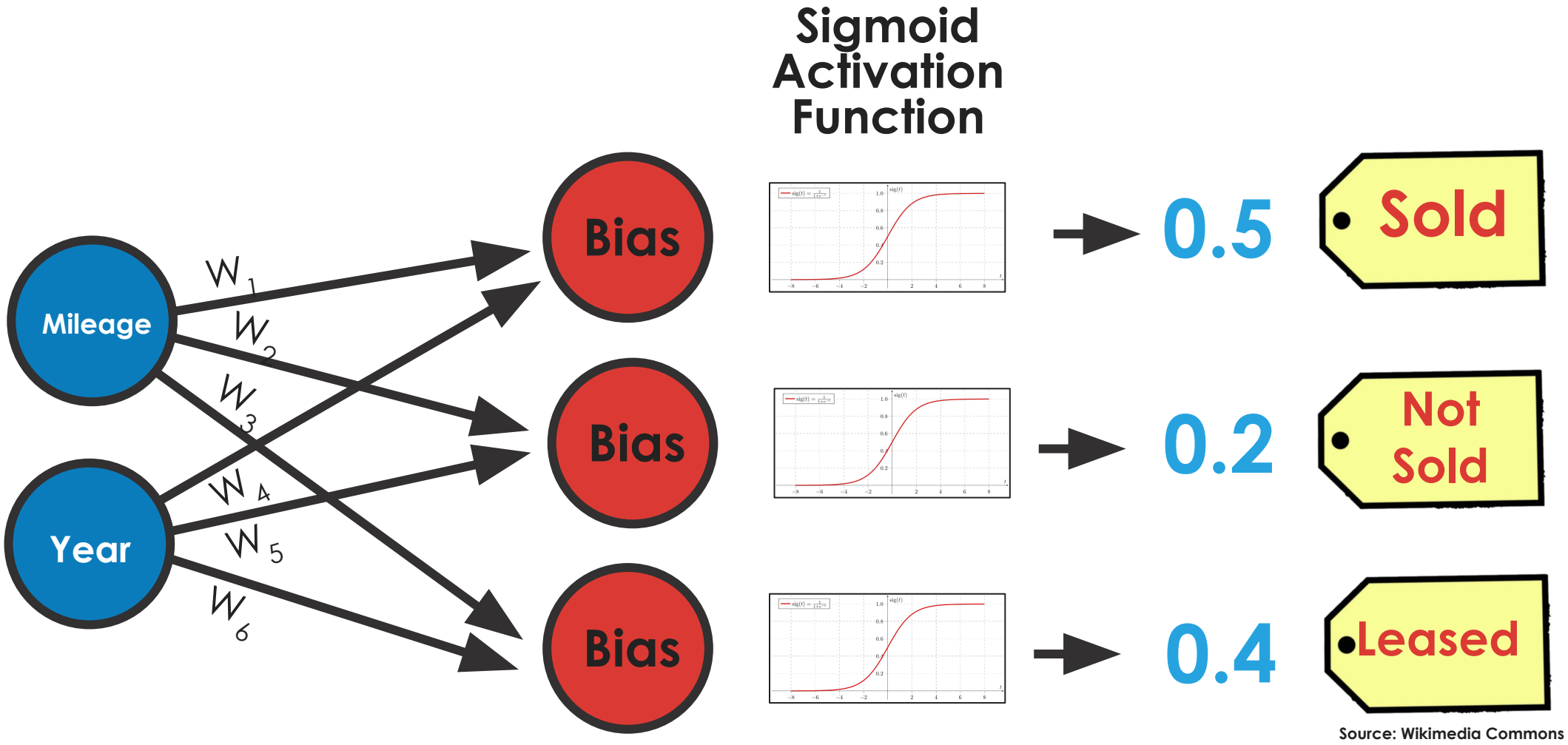
Multiclass Outcome



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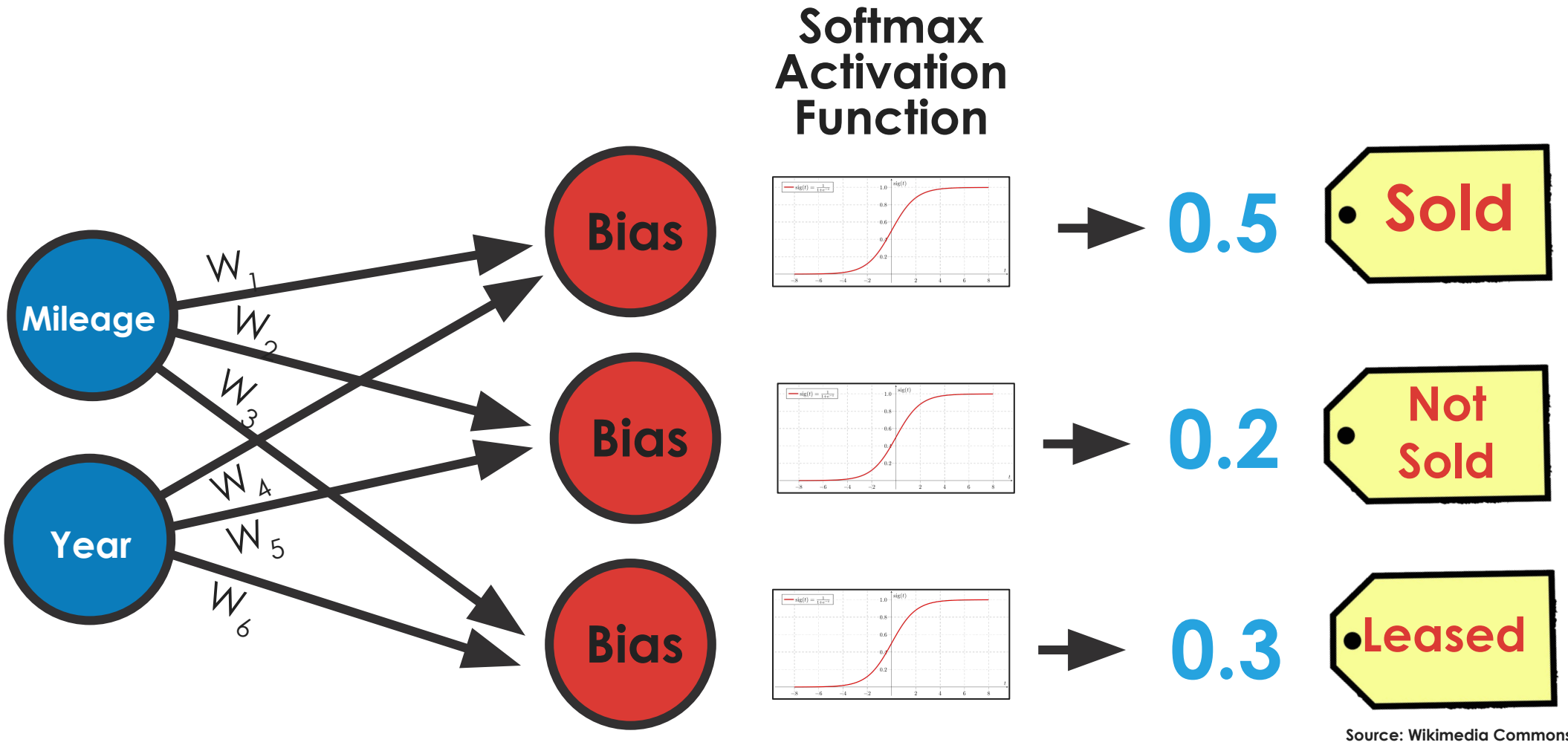
Softmax Activation Function



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