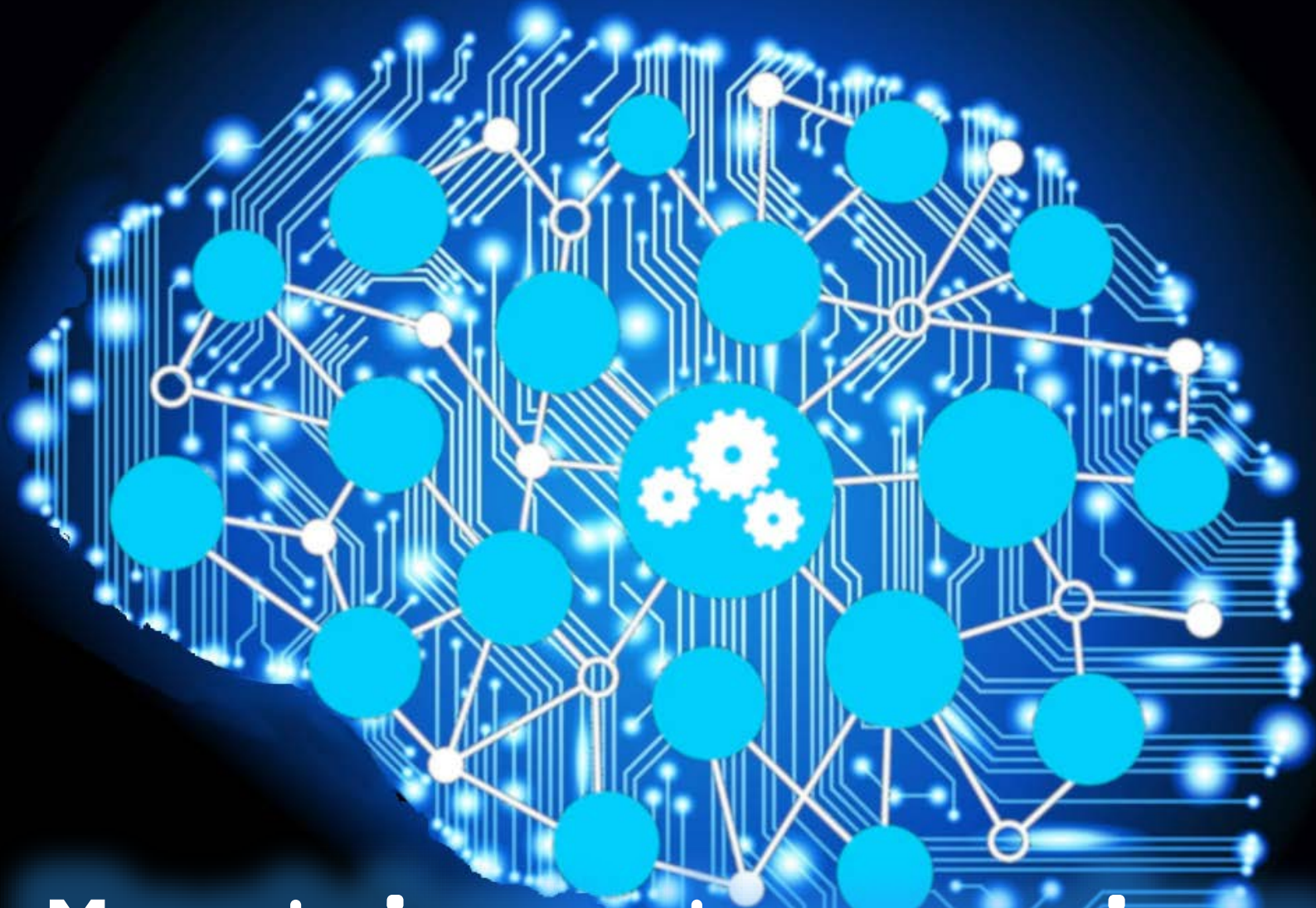


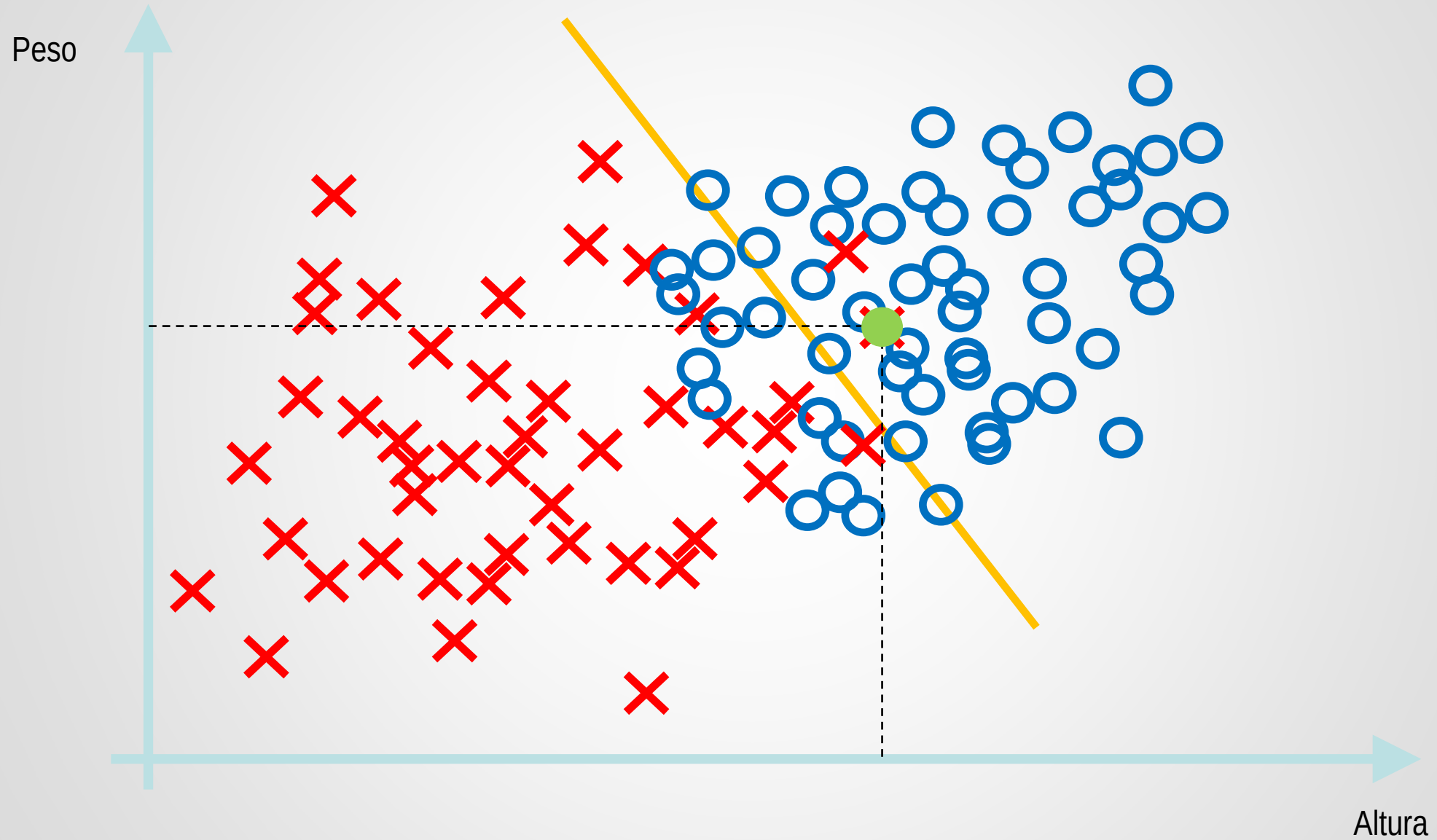


Machine Learning

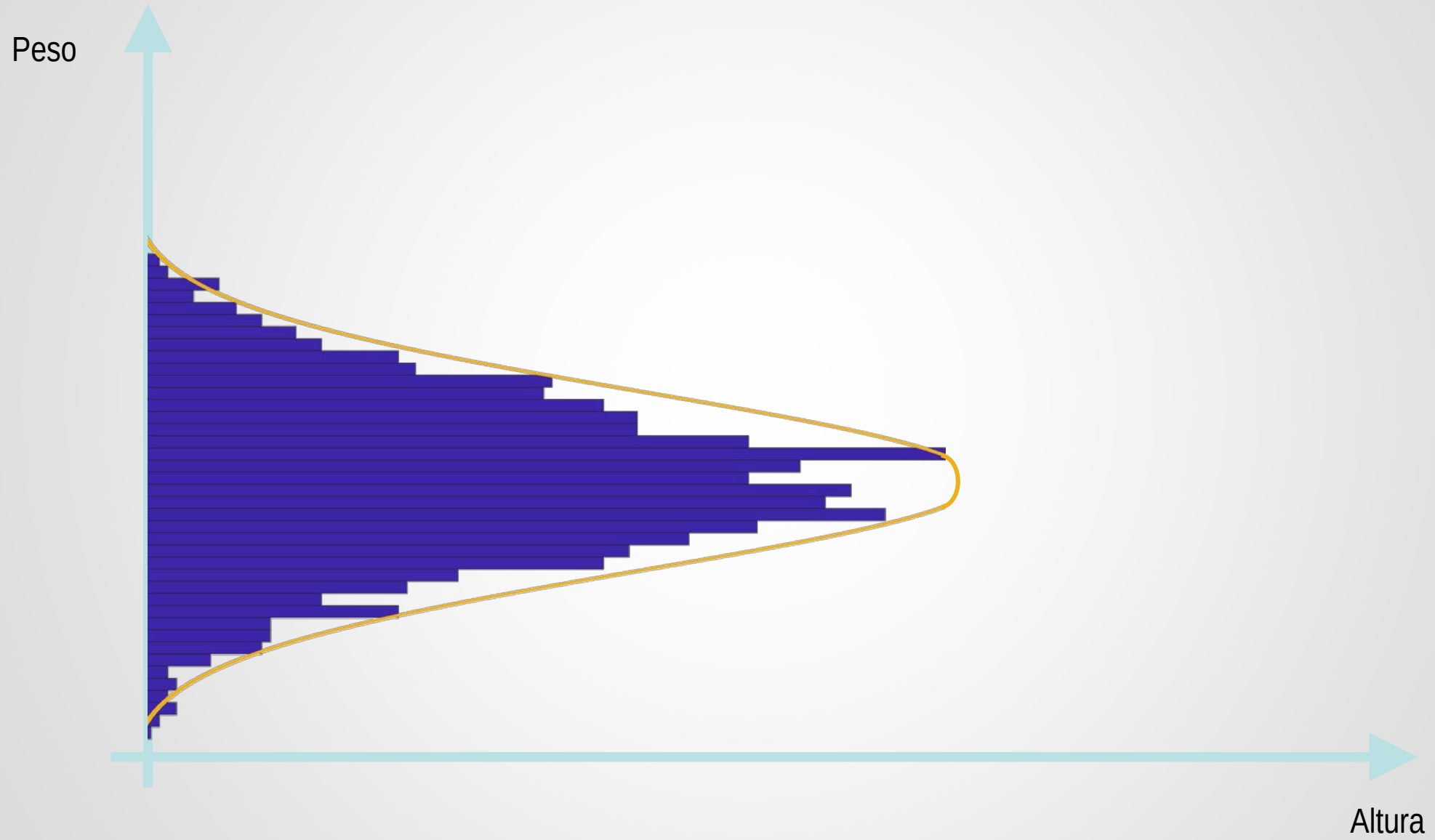
II. Clasificación

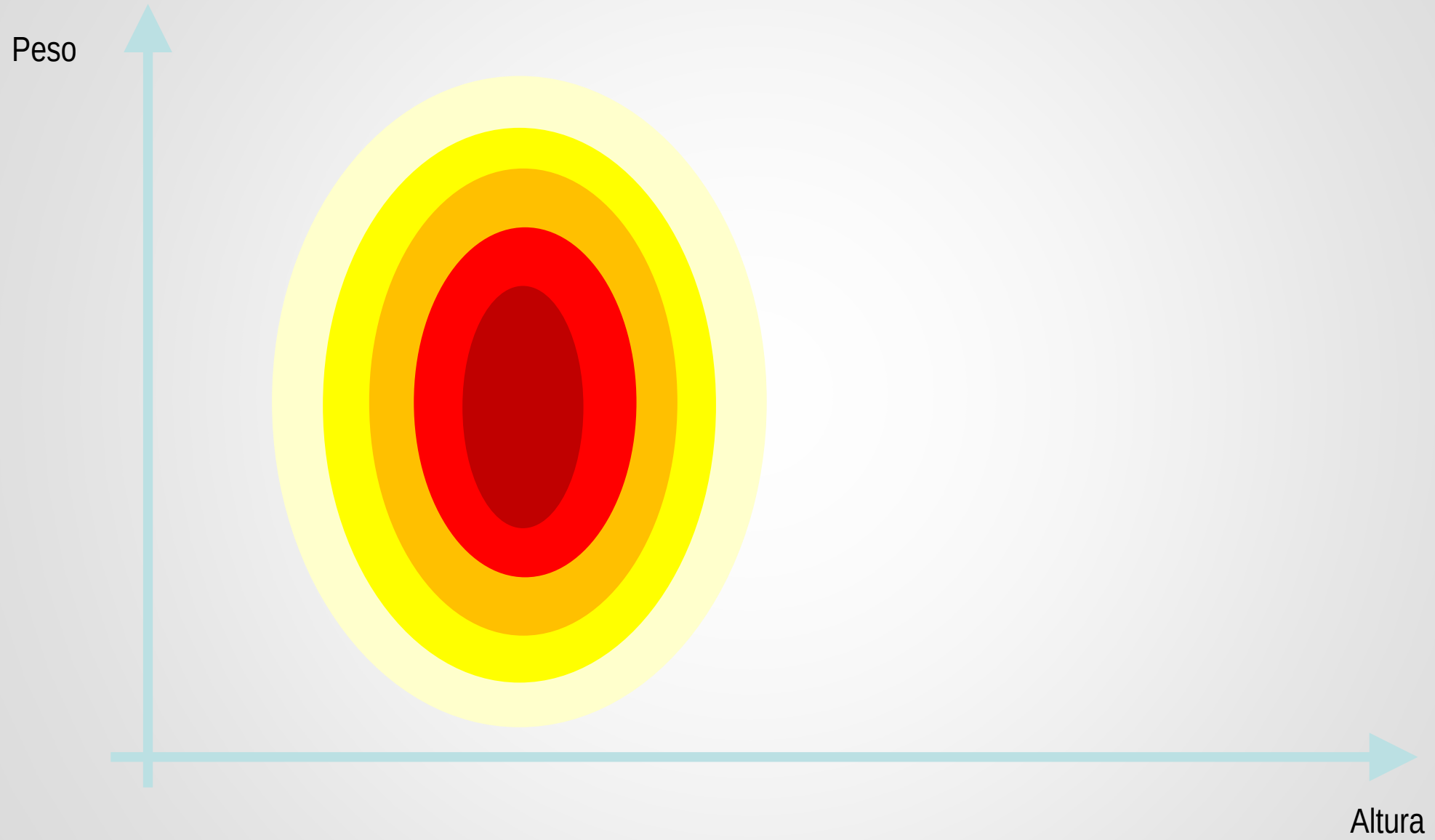
Revisada desde el punto de vista de Machine Learning



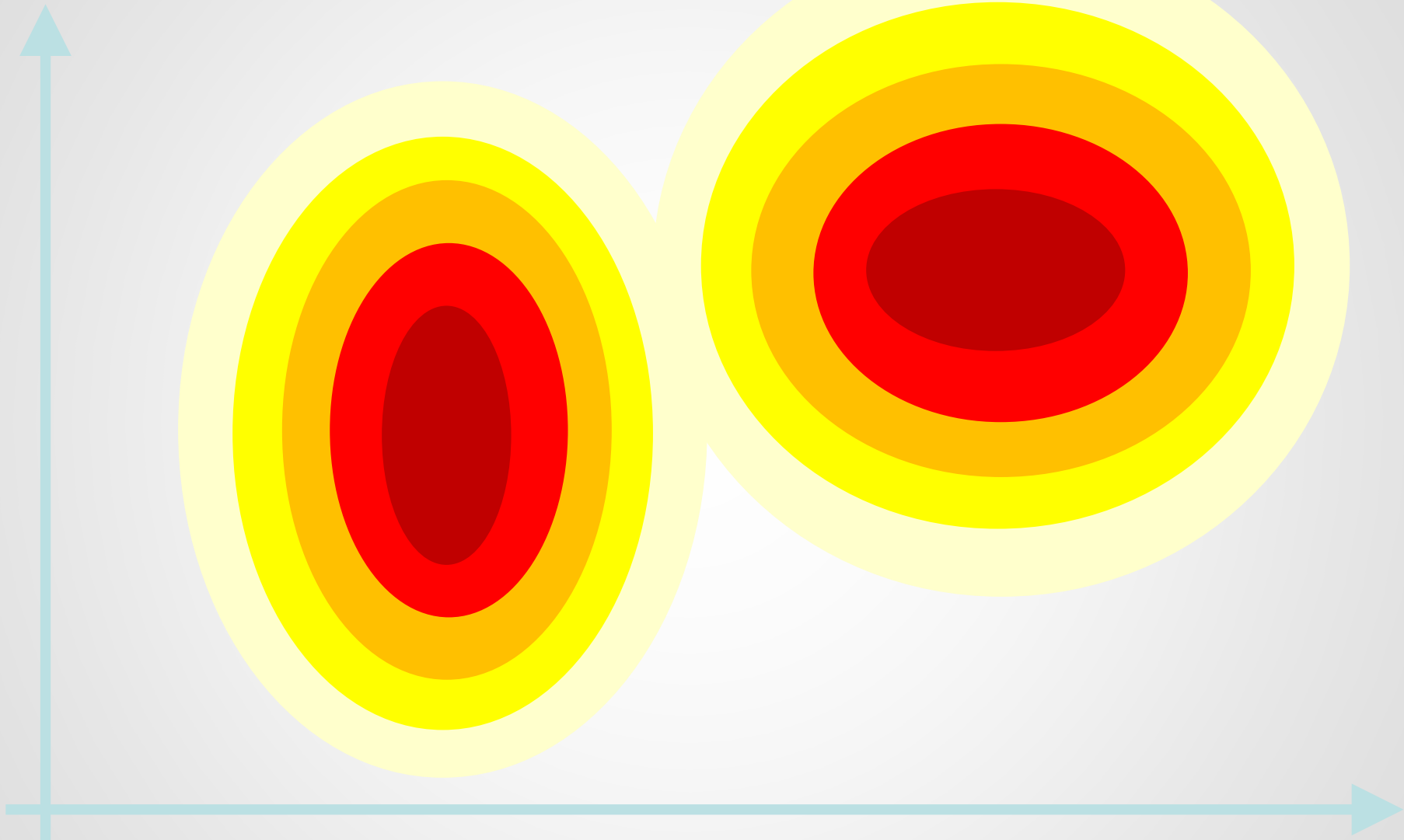






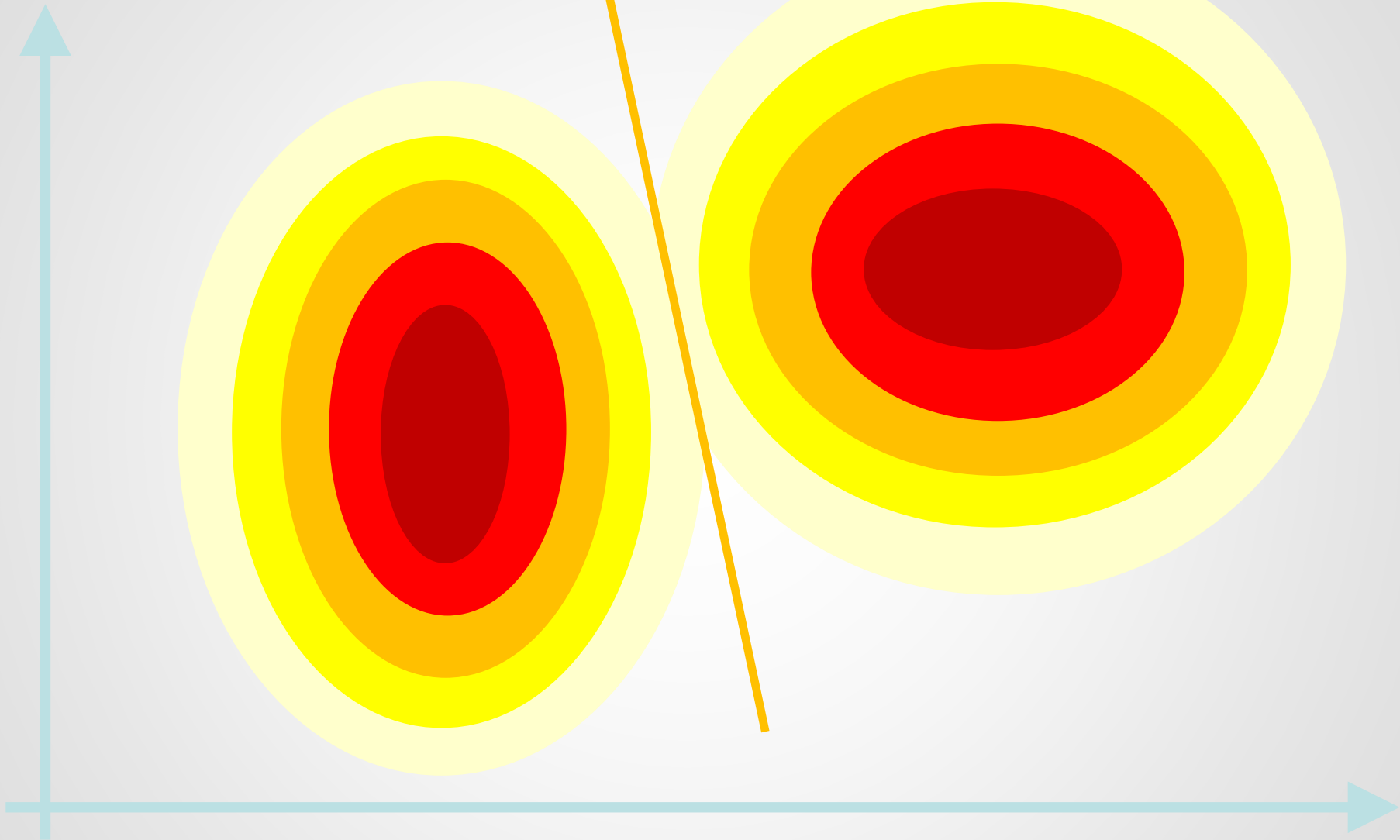


Peso



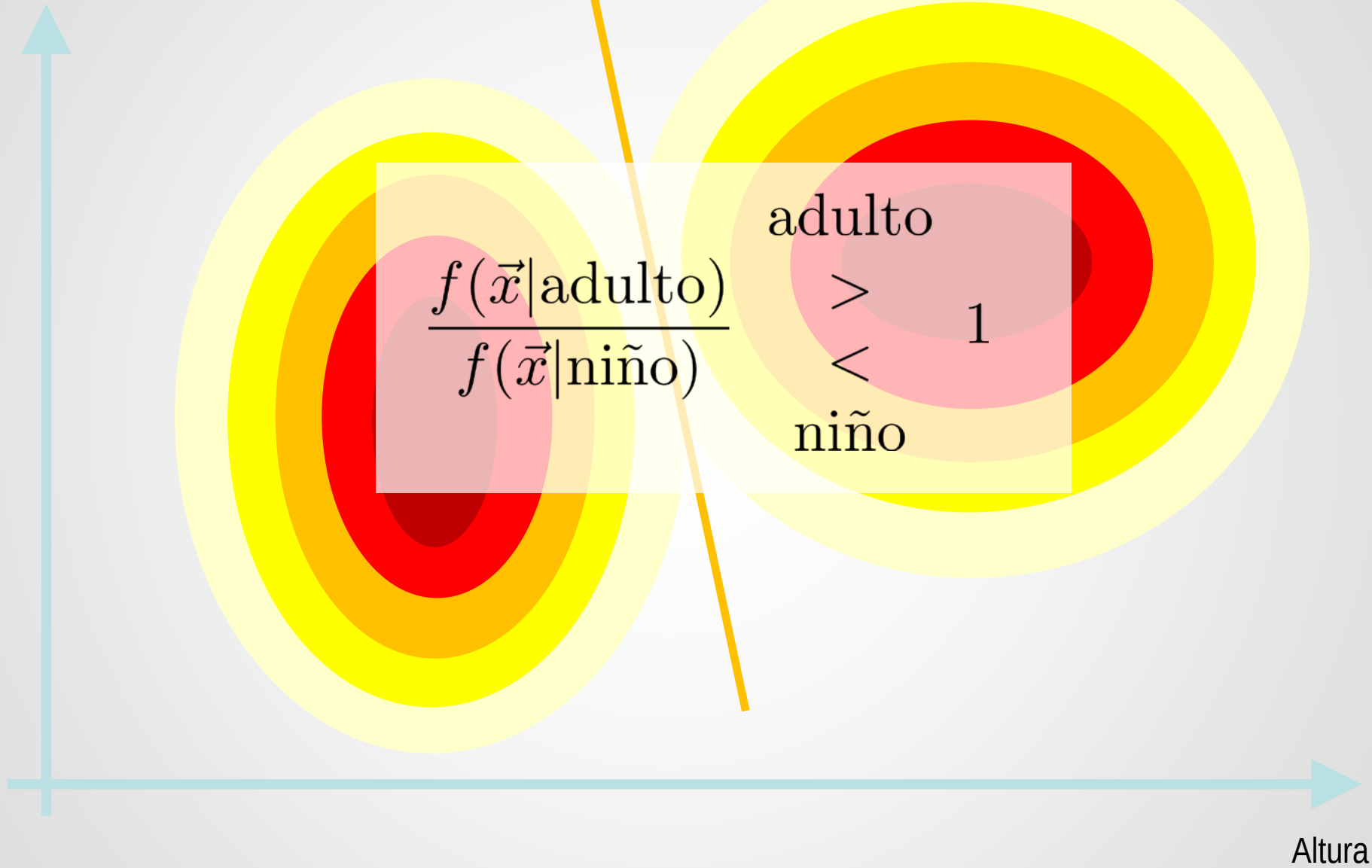
Altura

Peso



Altura

Peso

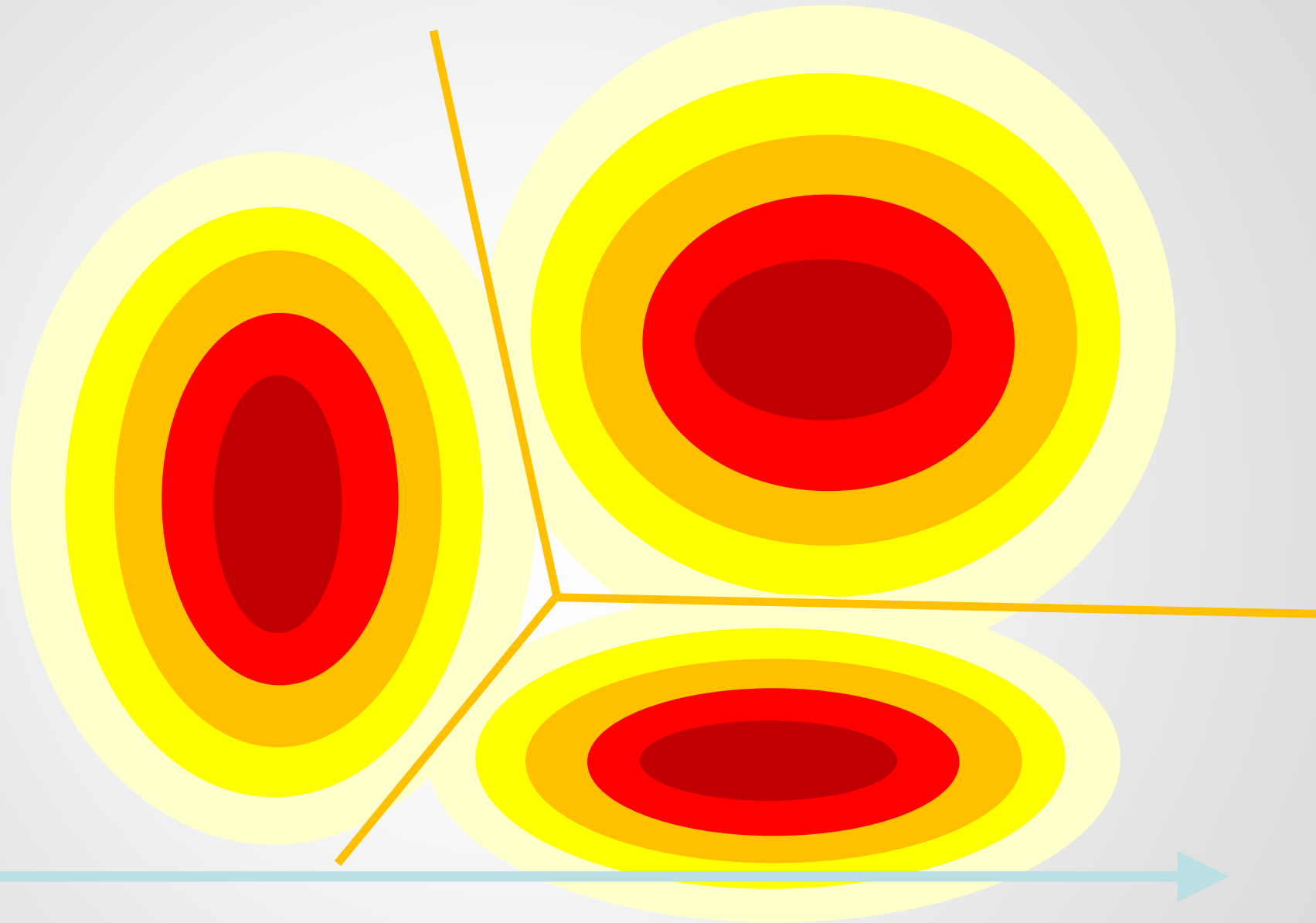


Altura

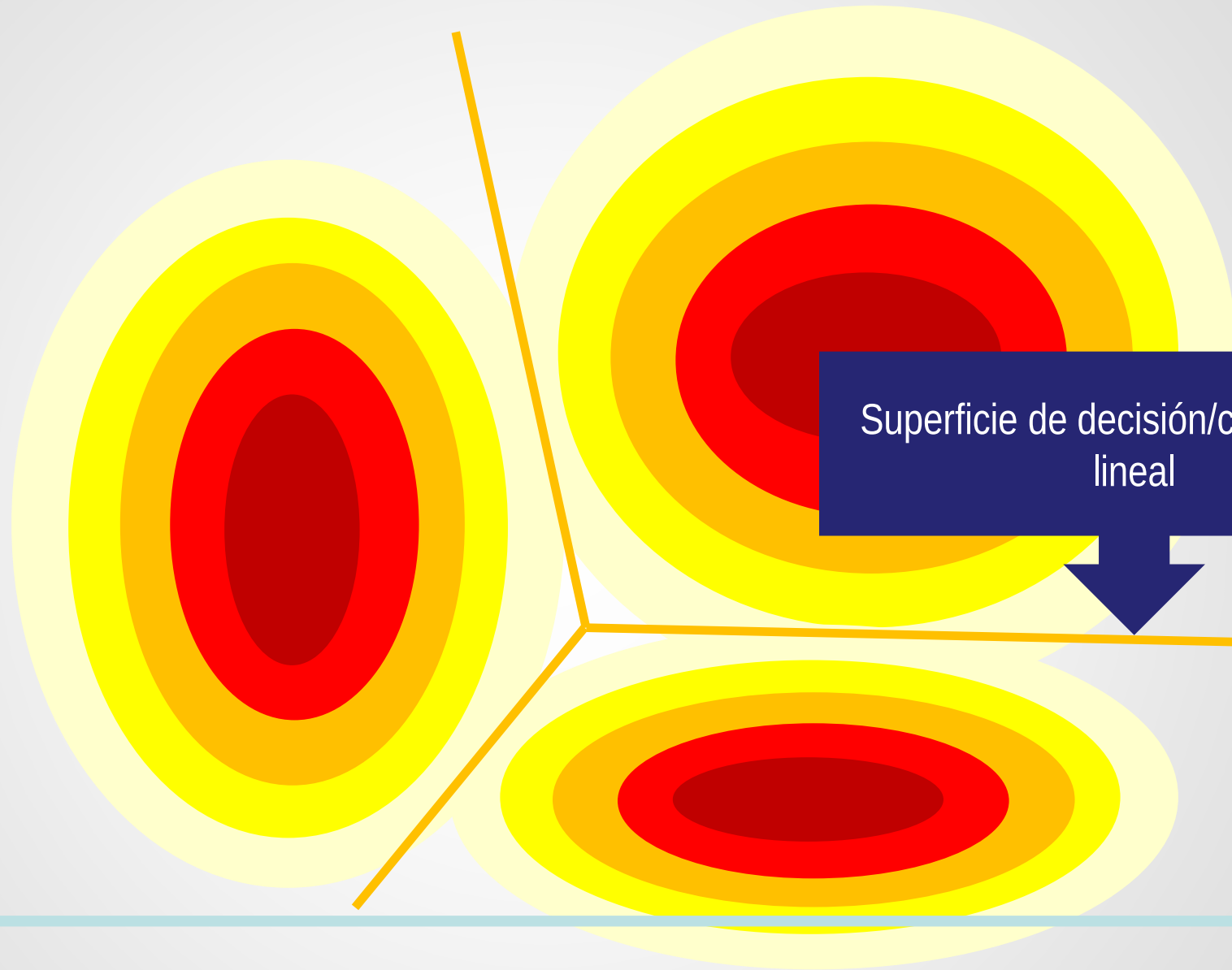
Peso



Altura



Peso



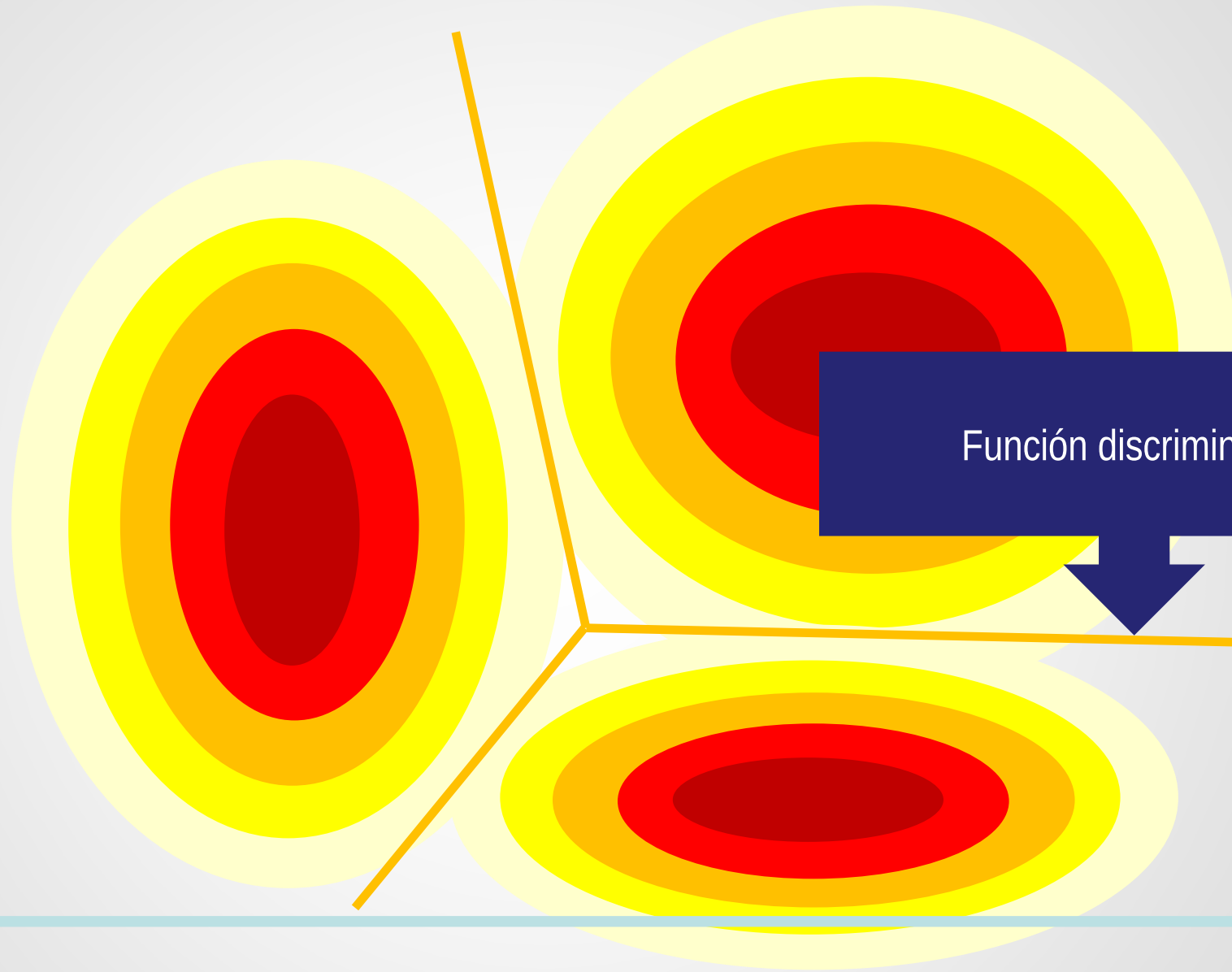
Superficie de decisión/clasificación
lineal



Altura



Peso

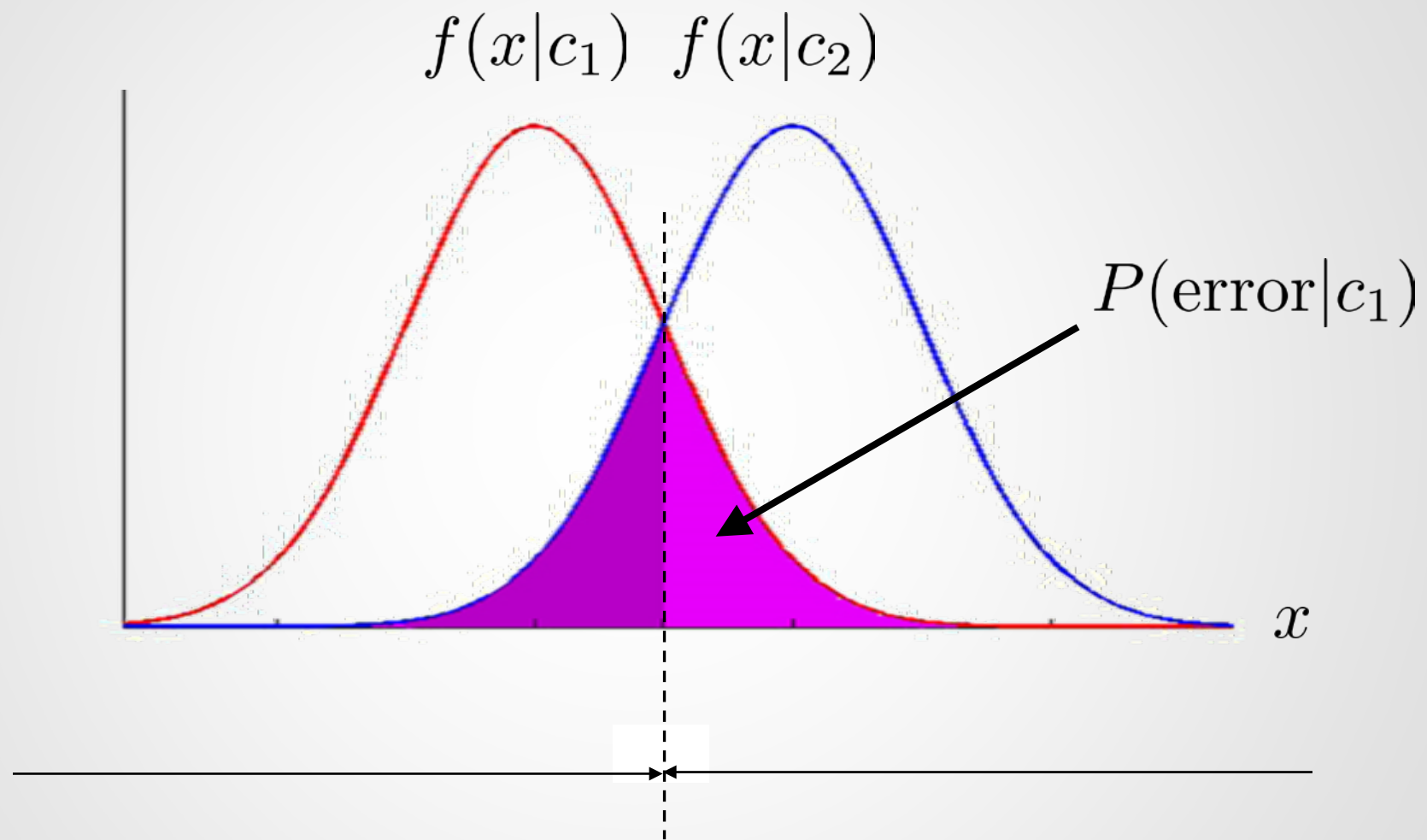


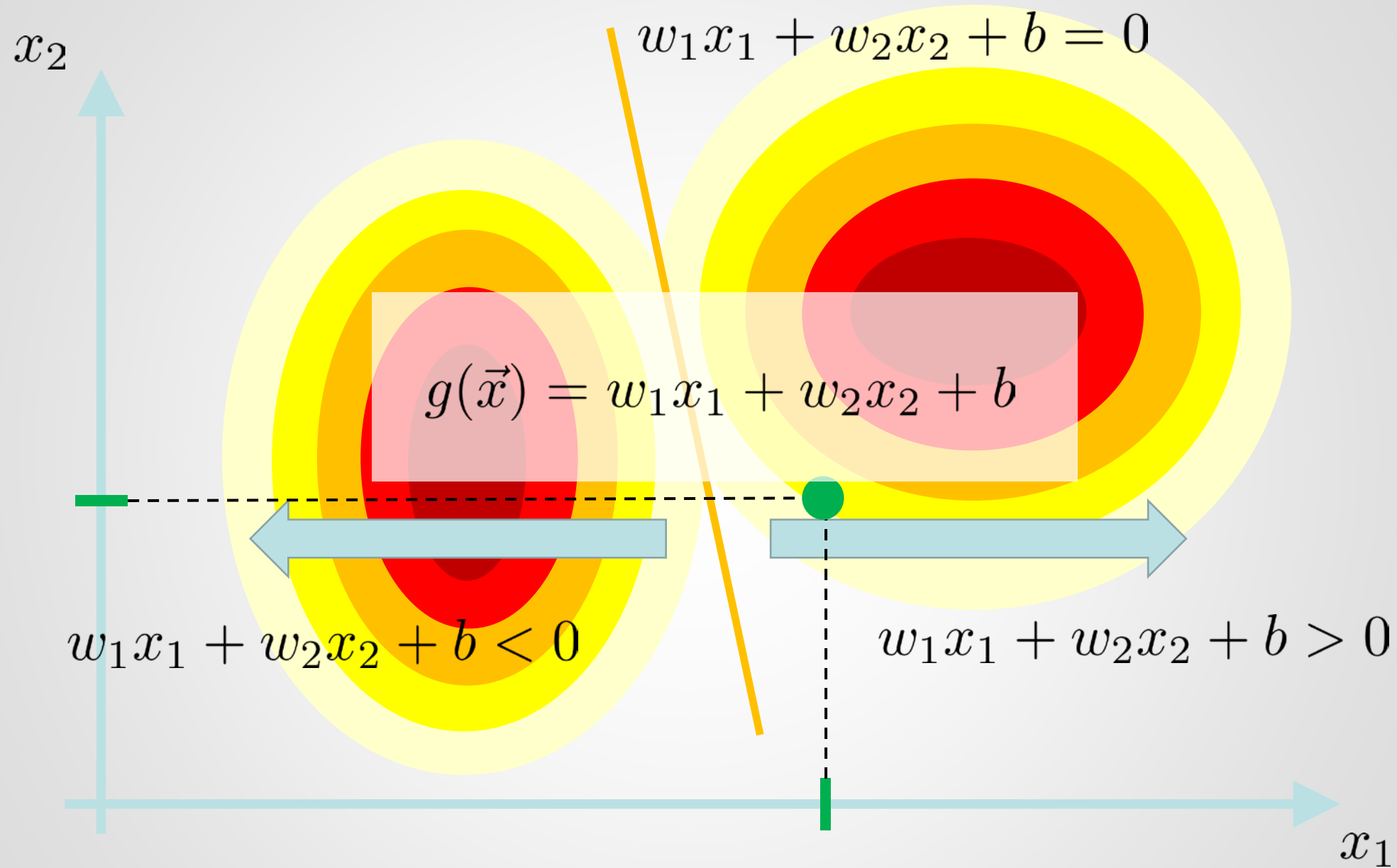
Función discriminante



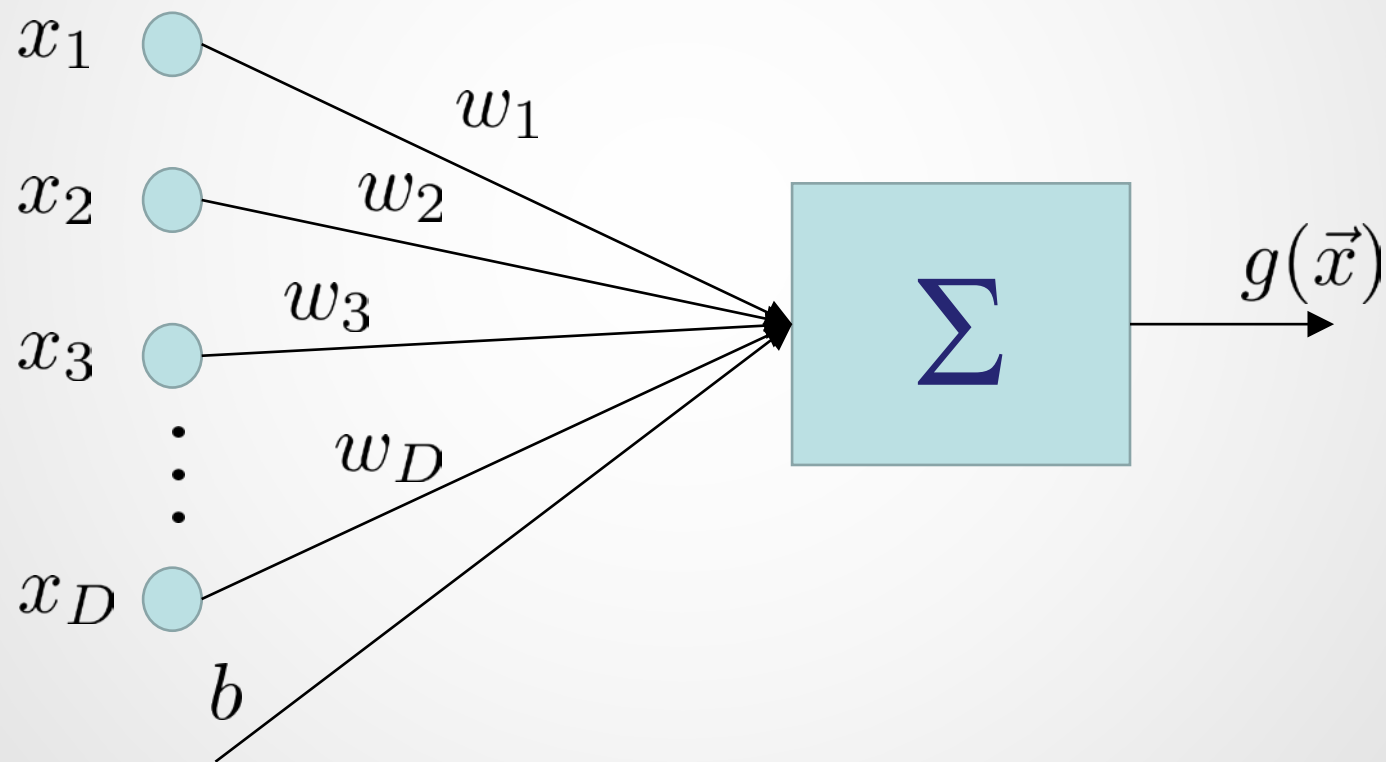
Altura





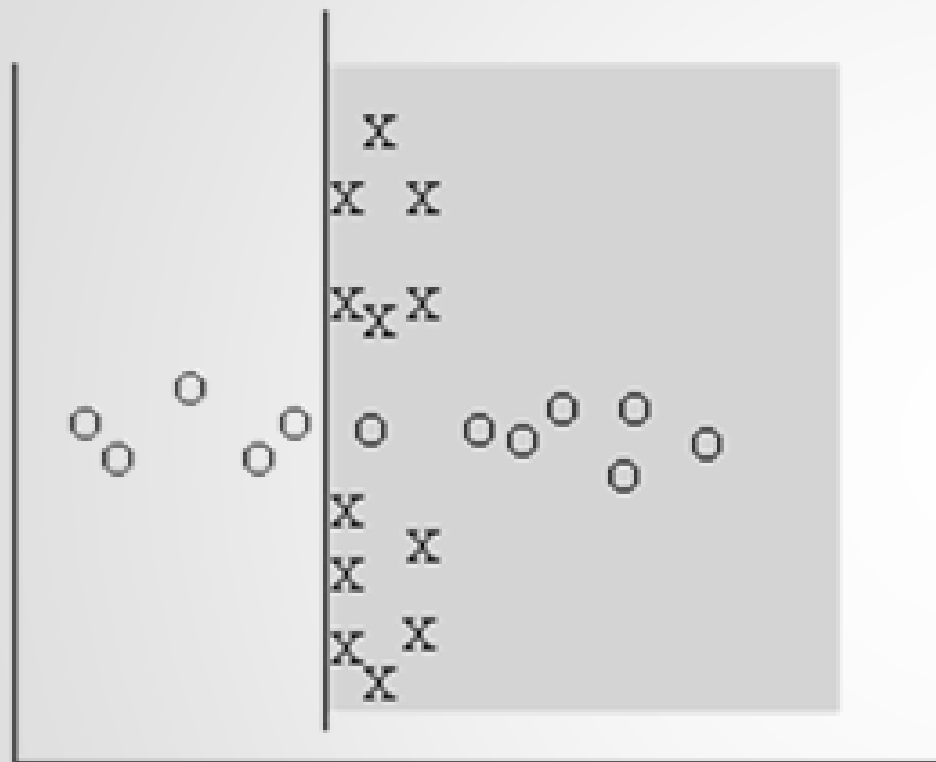


$$g(\vec{x}) = w_1x_1 + w_2x_2 + \dots + w_Dx_D + b$$



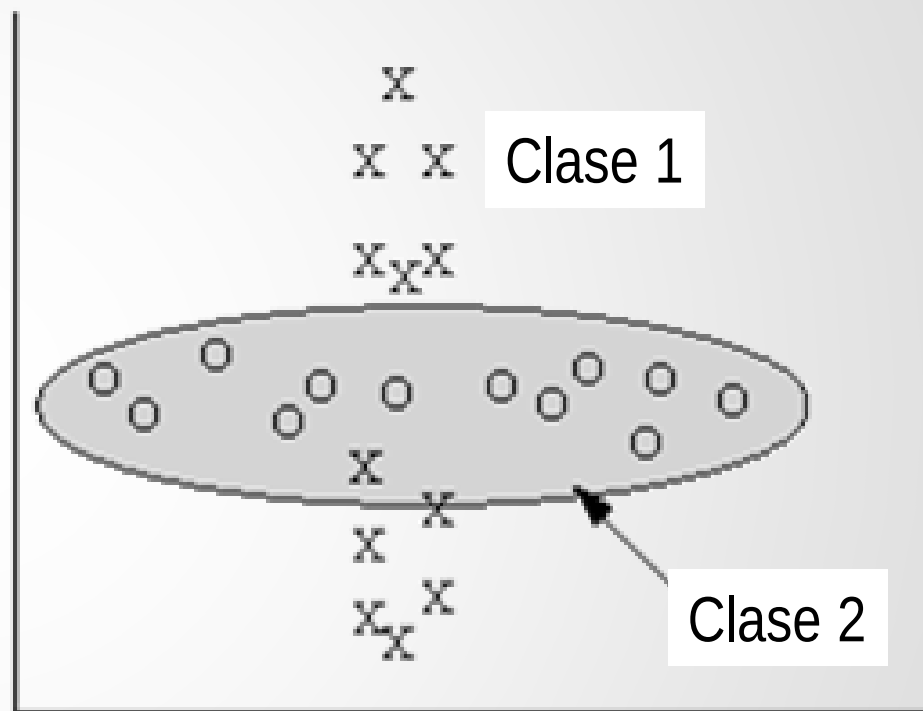
Clase 1

Clase 2



Clase 1

Clase 2

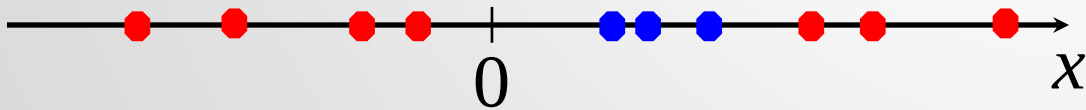


Teorema de Cover

Cualquier problema de reconocimiento de patrones es separable linealmente en algún espacio de dimensión suficientemente alta

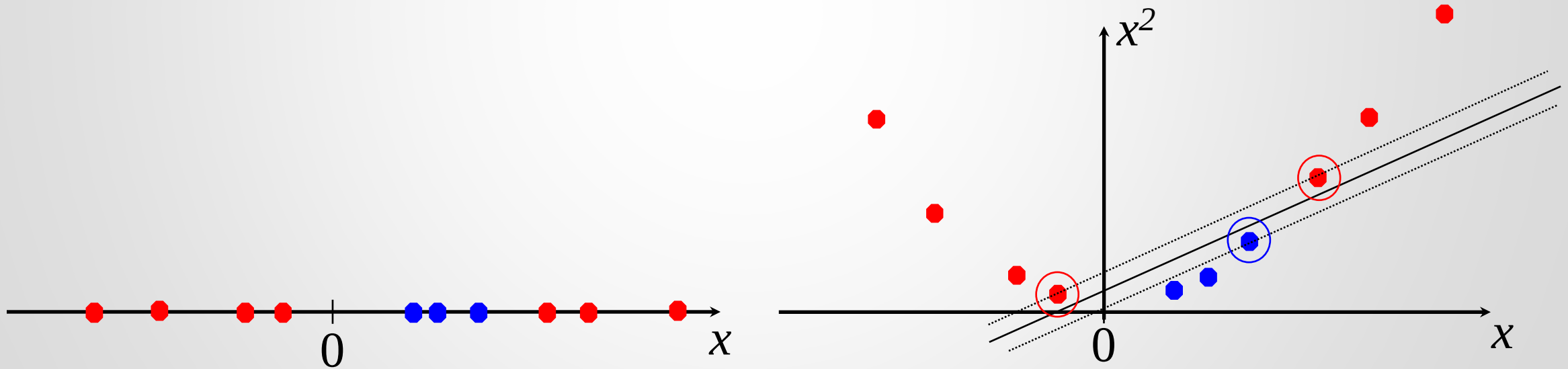
Teorema de Cover

Cualquier problema de reconocimiento de patrones es separable linealmente en algún espacio de dimensión suficientemente alta



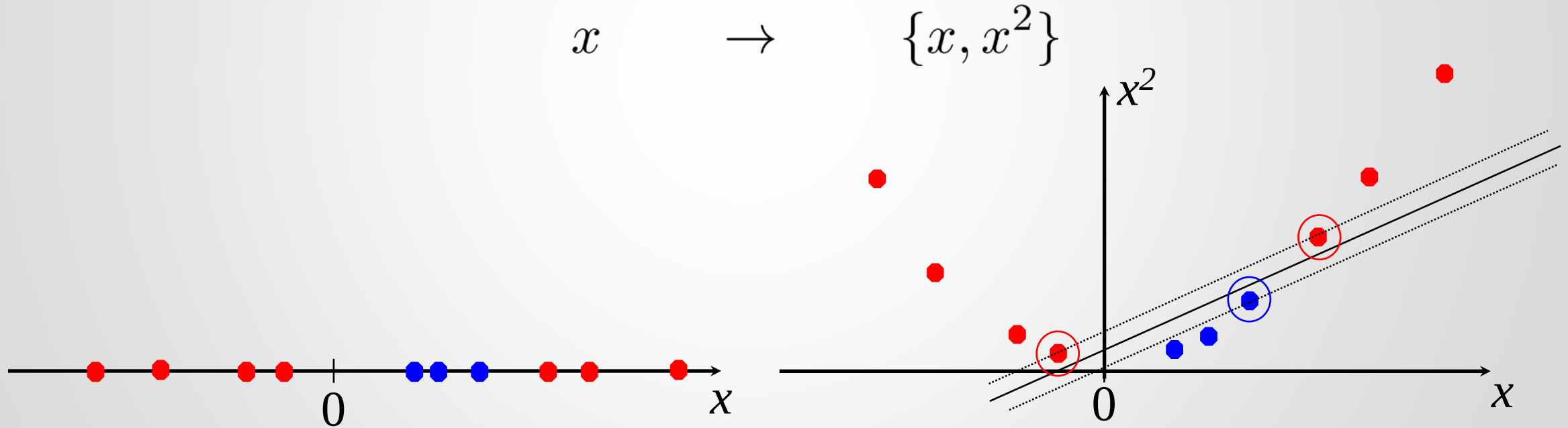
Teorema de Cover

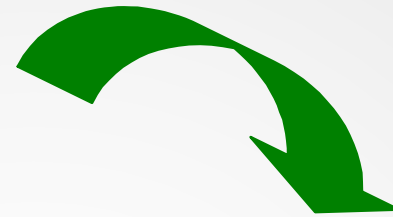
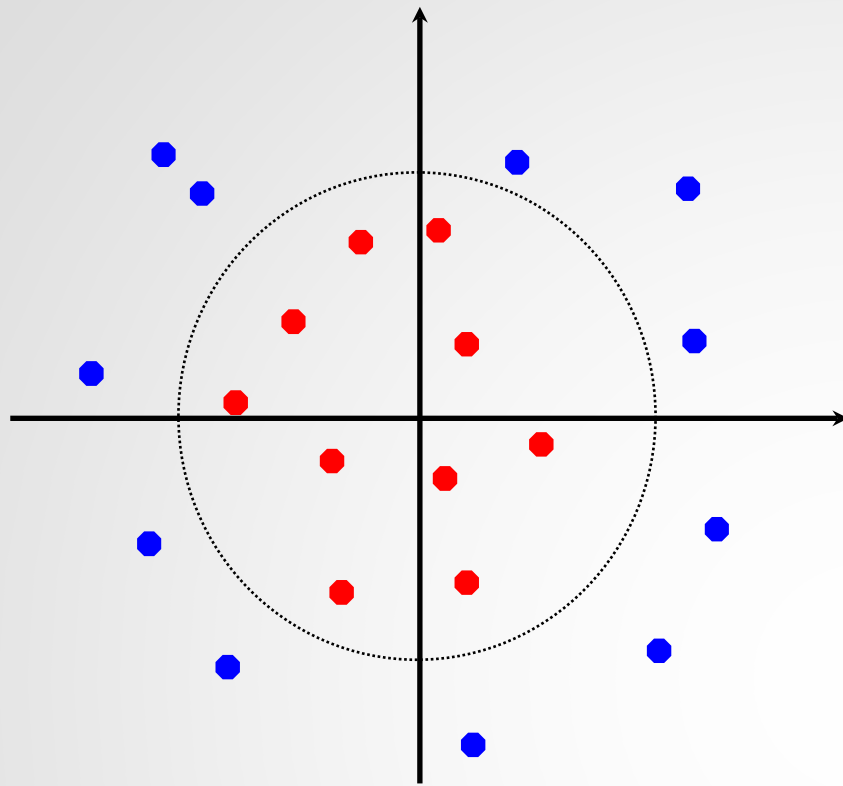
Cualquier problema de reconocimiento de patrones es separable linealmente en algún espacio de dimensión suficientemente alta



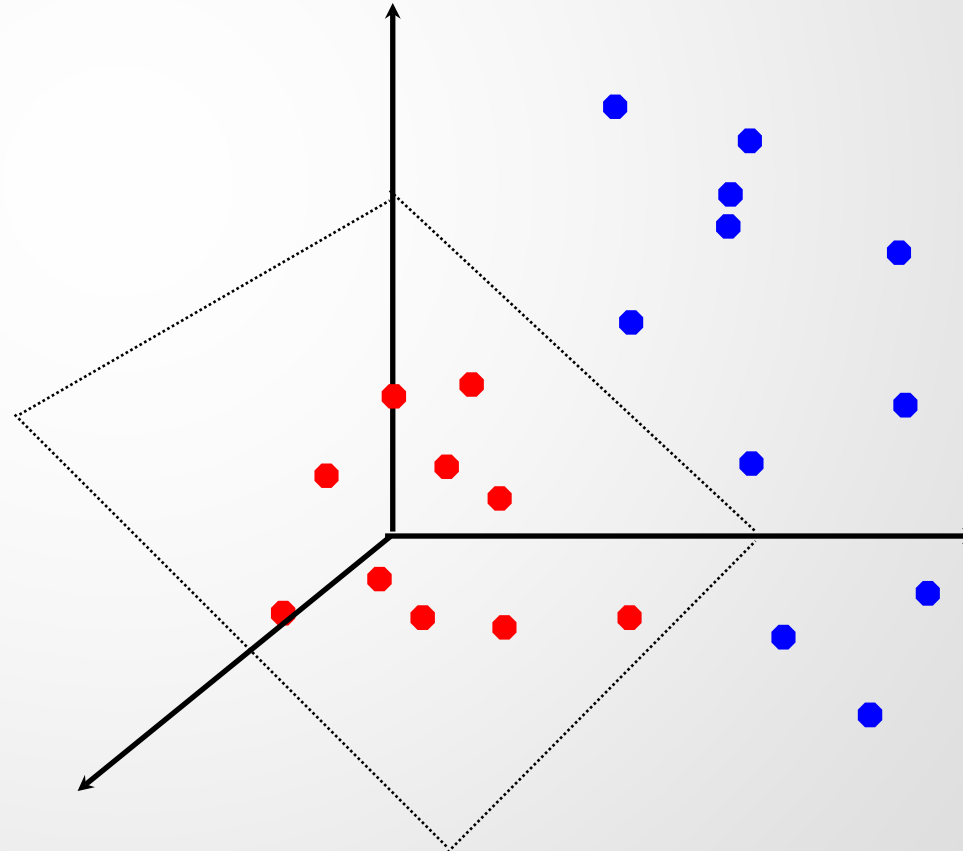
Teorema de Cover

Cualquier problema de reconocimiento de patrones es separable linealmente en algún espacio de dimensión suficientemente alta



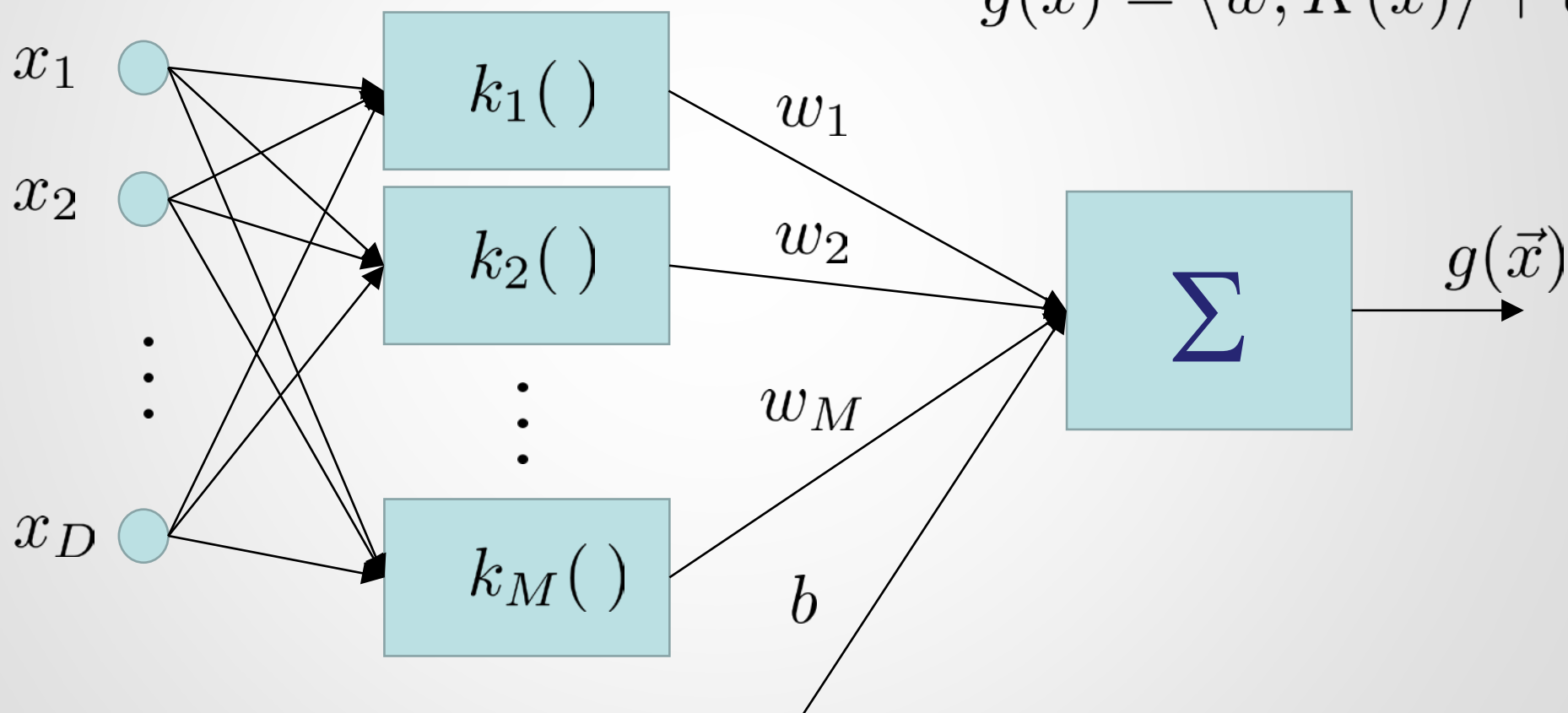


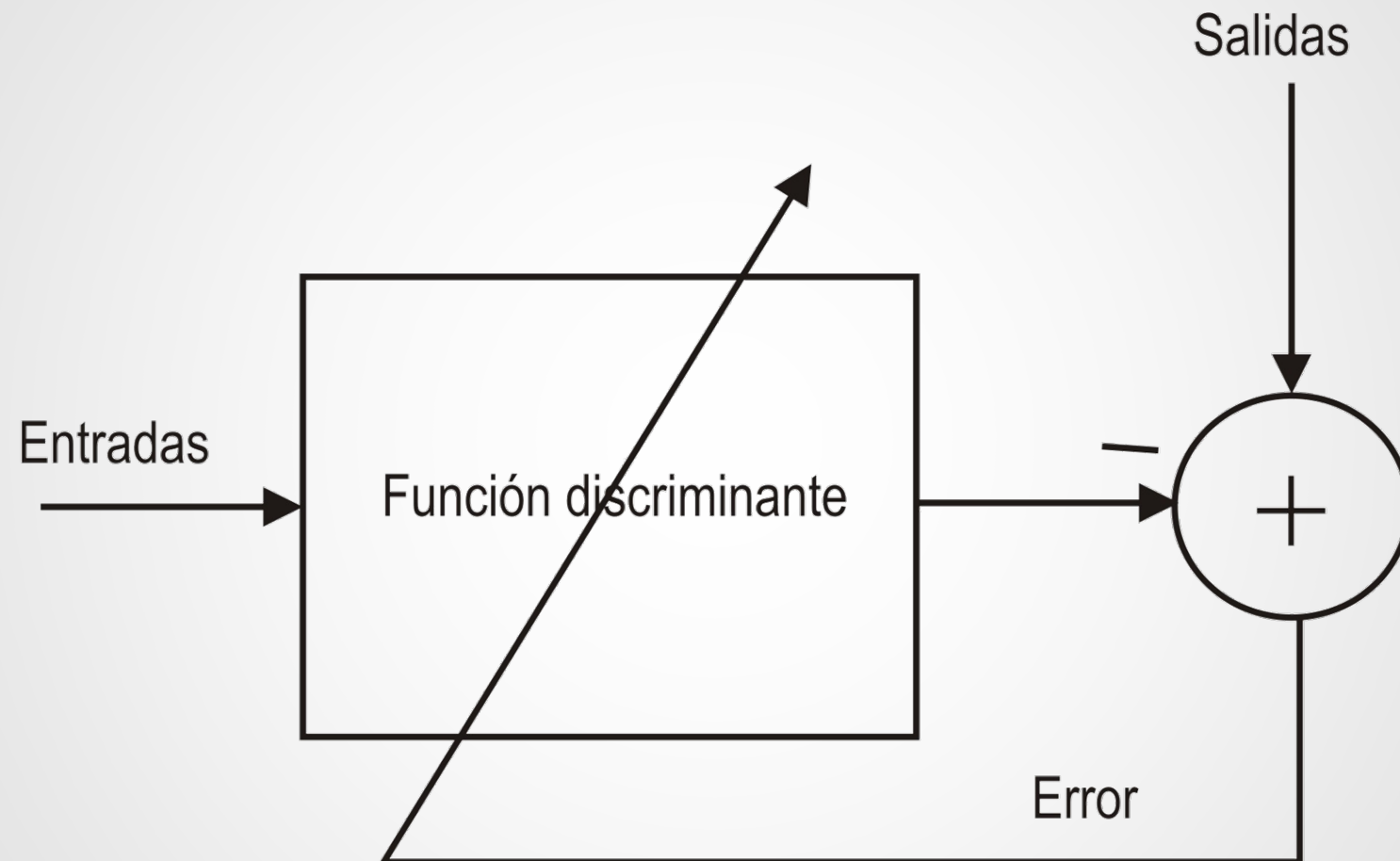
Kernel

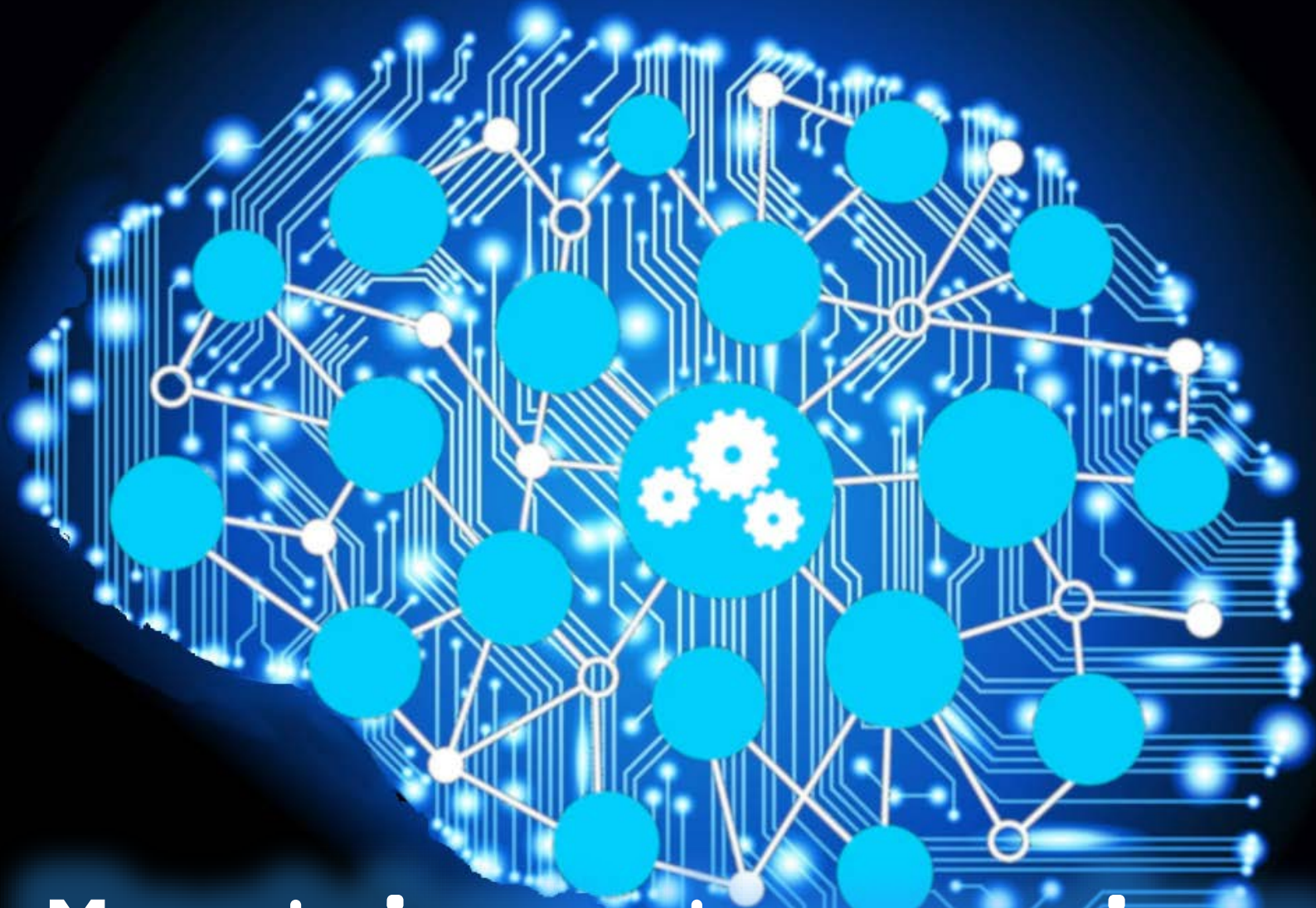


$$g(\vec{x}) = w_1 k_1(\vec{x}) + w_2 k_2(\vec{x}) + \dots + w_M k_M(\vec{x}) + b$$

$$g(\vec{x}) = \langle \vec{w}, K(\vec{x}) \rangle + b$$







Machine Learning