Negative Sampling: 1 Positive + k Negatives

Center: "cat"

Positive: "sat"

Maximize
$\sigma(v_{sat} \cdot v_{cat})$

Minimize
$\sigma(-v_{neg} \cdot v_{cat})$

Negative: "xylophone"

Negative: "democracy"

Negative: "telescope"

Negative: "ancient"

Negative: "purple"