



# Word2Vec: CBOW & Skip-Gram

- CBOW (Continuous Bag of Words) → Predict target word from context w
- Skip-Gram → Predict context words from target word.

## ##CBOW vs Skip-Gram Explained

### 1.CBOW (Continuous Bag of Words)

- Goal: Predict the **target word** based on its surrounding **context words**.
- Example: Sentence → "I live in India"
  - Context = ["I", "in", "India"]
  - Target = "live"
- The model tries to guess "live" from the given context words.
- Works well for frequent words, and training is fast.

### 2. Skip-Gram

- Goal: Predict the **context words** given the **target word**.
- Example: Sentence → "I live in India"
  - Target = "live"
  - Context = ["I", "in", "India"]
- The model tries to guess ["I", "in", "India"] from the word "live".
- Better for rare words, but training is slower.

### 3. Key Difference

- CBOW → context → target word