

## Supervised Learning



**Data:** Labeled datasets

**Requirement:** Manual annotation

**Cost:** High (time + labor)

## Unsupervised Learning



**Data:** Unlabeled data

**Requirement:** No labels needed

**Goal:** Find patterns

## Self-Supervised Learning



**Data:** Unlabeled → Auto-labeled

**Requirement:** Labels from data itself

**Advantage:** Leverage abundant data

*Traditional → Pattern Discovery → Modern Bridge Approach*