

# SVMs for Multi-Class Classification

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# Extend Binary Classification to Multi-Class

#### Given **n** classes, for example:

• Sentiment = {positive, negative, neutral, no opinion}

## One-vs.-one (pairwise) strategy:

- Create **n(n-1)** classifiers: pos|neg, pos|neu, pos|np, neg|neu, neg|np, neu|np
- Conflicting results?

### One-vs.-all strategy:

- Create **n** classifiers: positive or not, negative or not, neutral or not, np or not
- Pick the class with largest prediction value