

# Lecture 0 Handout: Introduction to NLP Tasks

CSCI 375: Fall 2024

Created by: Katie Keith

## Instructions

The goal of this activity is to introduce you to a few common NLP *tasks* and build some intuition for how you might program a computer to approach these tasks. For each of the three tasks below:

1. Attempt the example on your own, then
2. Brainstorm how you might program a computer to attempt *any example* for this task.

## Task 1: Sentiment Analysis

Choose the best category for each example.

**Example 1a:** This is a fantastic restaurant.

Sentiment is: ☐ Positive ☐ Neutral ☐ Negative

**Example 1b:** This restaurant did not impress me.

Sentiment is: ☐ Positive ☐ Neutral ☐ Negative

**Brainstorm how to program a computer that can tackle *any example* for this task:**

## Task 2: Machine Translation

Translate the following examples into a different language of your choice.

**Example 2a:** Mary works with John.

**Translation:**

**Example 2b:** She runs the company.

**Translation:**

**Brainstorm how to program a computer that can tackle *any example* for this task:**

### **\_\_\_\_\_ Task 3: Coreference resolution \_\_\_\_\_**

For each of the **underlined words** in the examples below, circle the word it refers to.

**Example 3a:** The cat sat on the mat because it was tired.

**Example 3b:** John took a train from Paris to Istanbul. He has family there.

**Brainstorm how to program a computer that can tackle *any example* for this task:**