

# ASSIGNMENT 1: EXPLORING WORD EMBEDDINGS

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## 1 INTRODUCTION

Assignment 1 is structured into three main tasks, aimed at deepening your practical understanding of word embeddings:

- **Task 1: Train Word Embeddings with Word2Vec** (50 points)
- **Task 2: Explore Word Embeddings** (30 points)
- **Task 3: Utilize Word Embeddings** (20 points)

In **Task 1**, you will engage in the hands-on implementation and training of Word2Vec models to generate word embeddings. **Task 2-3** will guide you on how to use word embeddings effectively.

## 2 ASSIGNMENT REQUIREMENTS

This assignment requires using a Google Colab notebook provided at the following link:

[https://colab.research.google.com/drive/lsxPeegJ\\_-aQNM-RO\\_\\_FutZ5WLZUdb0uu?usp=sharing](https://colab.research.google.com/drive/lsxPeegJ_-aQNM-RO__FutZ5WLZUdb0uu?usp=sharing)

YOU ARE REQUIRED TO:

1. **Make a copy of the provided Google Colab file.** First, you need to make a copy of the provided file into your own Google Drive. To accomplish this, open the Colab file link, navigate to File → Save a copy in Drive.
2. **Execute the notebook to generate results.** You can click on "Connect to GPU" to apply for a free T4 GPU. Then, you can press the large play button to run a code cell.
3. **Complete the Necessary Parts.** Some sections of the code are incomplete and require your input, especially pay attention to the parts marked with **[task]**. These sections are critical for scoring the assignment.

For more detailed instructions, refer to Working with Google Colab.

## 3 SUBMISSION GUIDELINES

Follow these steps to submit your assignment:

1. **Export the Notebook:** Navigate to File → Download .ipynb to download your notebook.
2. **Upload Your File:** Access the Blackboard system and upload your .ipynb file.

## 4 DEADLINE

**Important:** The assignment must be submitted by **11:59 pm October 10th, 2025**. Late submissions may be subject to penalties.

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\*Benyou Wang is the instructor.