

## AI Usage Card for DNLP SS24 Final Project Group 4



### CORRESPONDENCE(S)

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undefined

### PROJECT NAME

DNLP SS24 Final Project Group 4

### KEY APPLICATION(S)

Baseline implementations of BERT (sentiment analysis, question similarity, semantic similarity) and BART (paraphrase type generation and detection).

### MODEL(S)

BERT, BART, Elicit.org (ChatGPT), and Github-Copilot

### DATE(S) USED

2024-05-08

### VERSION(S)

from transformers (huggingface) facebook/bart-large, from transformers (huggingface) BartForConditionalGeneration, from base<sub>bert</sub>BertPreTrainedModel

### IDEATION

#### GENERATING IDEAS, OUTLINES, AND WORKFLOWS

Not used

#### IMPROVING EXISTING IDEAS

Not used

#### FINDING GAPS OR COMPARE ASPECTS OF IDEAS

Not used

### LITERATURE REVIEW

BERT, BART, Elicit.org (ChatGPT), and Github-Copilot

#### FINDING LITERATURE

Provide Elicit.org with a research question or a prompt and you will be given papers that match your question. Elicit.org helps you find relevant papers in your area of interest. Try it!

#### FINDING EXAMPLES FROM KNOWN LITERATURE

Not used

#### ADDING ADDITIONAL LITERATURE FOR EXISTING STATEMENTS AND FACTS

Not used

#### COMPARING LITERATURE

Not used

### METHODOLOGY

#### PROPOSING NEW SOLUTIONS TO PROBLEMS

GithubCopilot helps you solve bugs in your code and sometimes comes up with novel ideas that you haven't tried yet.

#### FINDING ITERATIVE OPTIMIZATIONS

Not used

#### COMPARING RELATED SOLUTIONS

Not used

### EXPERIMENTS

BERT, BART, Elicit.org (ChatGPT), and Github-Copilot

#### DESIGNING NEW EXPERIMENTS

Not used

#### EDITING EXISTING EXPERIMENTS

sentiment analysis, question similarity, semantic similarity were the task we mostly implemented ourself using BERT. Using BART we implemented paraphrase type generation and detection tasks.

#### FINDING, COMPARING, AND AGGREGATING RESULTS

Based on initial results on the baseline models, we compared our improvements to the baseline models.

### WRITING

#### GENERATING NEW TEXT BASED ON INSTRUCTIONS

Not used

#### ASSISTING IN IMPROVING OWN CONTENT

Not used

PRESENTATION	PARAPHRASING RELATED WORK Not used	PUTTING OTHER WORKS IN PERSPECTIVE Not used
	GENERATING NEW ARTIFACTS Not used	IMPROVING THE AESTHETICS OF ARTIFACTS Not used
	FINDING RELATIONS BETWEEN OWN OR RELATED ARTIFACTS Not used	
CODING BERT, BART, Elicit.org (ChatGPT), and Github-Copilot	GENERATING NEW CODE BASED ON DESCRIPTIONS OR EXISTING CODE GithubCopilot's extension to VsCode can translate pseudo code into machine readable code.	REFACTORING AND OPTIMIZING EXISTING CODE when writing a new lossfunction for the BART paraphrase detection task, I needed an implementation using tensors and not just np.ndarrays.
	COMPARING ASPECTS OF EXISTING CODE Not used	
DATA	SUGGESTING NEW SOURCES FOR DATA COLLECTION Not used	CLEANING, NORMALIZING, OR STANDARDIZING DATA Not used
	FINDING RELATIONS BETWEEN DATA AND COLLECTION METHODS Not used	
ETHICS	WHAT ARE THE IMPLICATIONS OF USING AI FOR THIS PROJECT? undefined	WHAT STEPS ARE WE TAKING TO MITIGATE ERRORS OF AI FOR THIS PROJECT? The AI written code was always double checked.
	WHAT STEPS ARE WE TAKING TO MINIMIZE THE CHANCE OF HARM OR INAPPROPRIATE USE OF AI FOR THIS PROJECT? So far, we left the github project "private". We may change that in the future after discussing it as a group.	THE CORRESPONDING AUTHORS VERIFY AND AGREE WITH THE MODIFICATIONS OR GENERATIONS OF THEIR USED AI-GENERATED CONTENT Yes