

# Latex support

Your name

## 1 Introduction

This is a  $\LaTeX$  file. Follow the text in `exercises.pdf` and recreate the text as well as formatting in your own document.

Recreate this line and footnote<sup>1</sup>. Do not forget to include the newlines.

### 1.1 Comments on referencing

In order for the citations to work, either in this format: `devlin2018bert` or in this format: Devlin et al. 2018, the following must be added at the end of the  $\LaTeX$  document:

```
\bibliography{library.bib}
```

Or, if you are using the in other format, as illustrated below.

```
\printbibliography
```

This line above is already included in this template. The bibliography is created automatically from `library.bib` file you have imported from the github repository. Open the file and explore it. Add the Introduction to NLP coursebook by Jurafsky and add its reference using Google Scholar <sup>2</sup>. Cite it here: [insert reference].

## 2 Formatting

To achieve the main purpose of the project, the following objectives were identified.

1. This is one goal.
2. This is another goal.
3. ...

The experiments yielded interesting results.

- **Experiment 1:** This is a result.
- **Experiment 2:** This is another result.

Notice the gap difference between the previous bullet formatting and the one below.

- This is a *point*;
- This is *another* point.

Several conclusions were made.

### 2.1 Headache cases

Hint: look for cite and mathematical equations inside latex text.

As an example Tversky and Gati 1982<sup>3</sup> provided  $w_1$  relating to  $w_2$ ,  $w_2$  to  $w_3$ , yet  $w_1$  and  $w_3$  not having a se-

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<sup>1</sup>This is a footnote.

<sup>2</sup>This is a clickable link: <https://scholar.google.com/>

<sup>3</sup>This citation mode should be easy.

mantic connection.

The perplexity<sup>this is a superscript</sup> can be expressed as illustrated in the Equation 1 below. This equation was brought to you by an equation Generator<sup>4</sup>.

$$\sqrt[N]{\frac{1}{\frac{n}{n-1} \cdot \frac{1}{2}}} \quad (1)$$

Here is some randomly generated text, used here and in the following Section. "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."

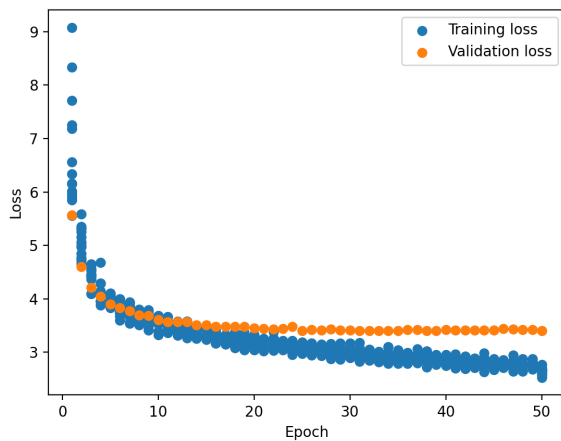
### 3 Figures

Your task is to add some images. You can find image1, image2 and image3 in the folder data in the repository. Import and use them as illustrated in Figure 1 and Figure 2, respectively. First, add a separate image. Now join two

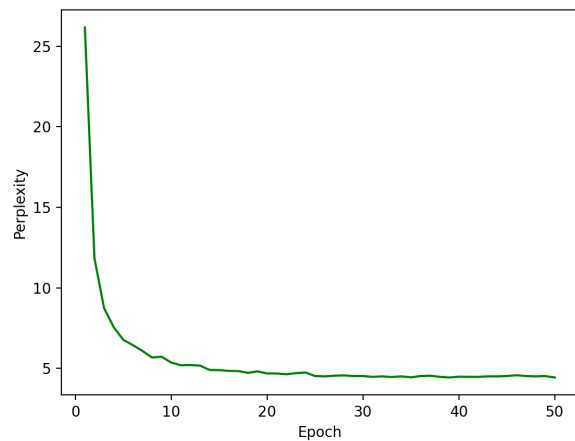
**Figure 1:** Try creating a caption over, then under the image



images as illustrated below in Figure 2 (a-b).



**(a)** Training and validation loss



**(b)** Perplexity

**Figure 2:** A secret model trained on a secret dataset for a secret task for 50 epochs

Next, your task is to add a table. Use a Table Generator<sup>5</sup>. You can find the `table.xls` in the folder data in the repository. Generate a table and add one as illustrated in Table 1, respectively.

<sup>4</sup><https://www.codecogs.com/latex/eqneditor.php>

<sup>5</sup><https://www.tablesgenerator.com/>

**Table 1:** Some randomly generated numbers

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<b>Recall</b>	<u>99.84%</u>	93.43%	96.88%	90.84%
<b>Precision</b>	95.32%	<u>99.09%</u>	90.32%	<u>99.24%</u>

## 4 Paragraphs

Recreate different paragraph separation styles.

### 4.1 Parahraph separation style no.1

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### 4.2 Parahraph separation style no.2

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"Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo."

## References

- [1] Jacob Devlin et al. "Bert: Pre-training of deep bidirectional transformers for language understanding". In: *arXiv preprint arXiv:1810.04805* (2018).
- [2] Amos Tversky and Itamar Gati. "Similarity, separability, and the triangle inequality." In: *Psychological review* 89.2 (1982), p. 123.