# PROJECT REPORT LATEX TEMPLATE

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#### 1 INTRODUCTION

This is a LaTEX template created following the Project Report Guidelines of the Examination Office at the International University of Applied Sciences. Please review carefully if all the details in this template are the same as those in the official guidelines.

#### 1.1 Content

In general, reports:

- introduce a topic, explaining the motivation and goals of the work,
- · describe the method,
- · present the results, and
- conclude discussing the implications of the work.

#### 2 EXAMPLES

The captions of tables and figures should clearly explain the presented content, see for example Table 1 and Figure 1. Next, see an example of a mathematical expression, where x is the input to a Rectified Linear Unit (ReLU) activation function (Goodfellow et al., 2016):

$$f(x) = \max(0, x). \tag{1}$$

Finally, this is how you cite online material (Stutz, 2020), an article (LeCun et al., 1989), and a book (Velarde, 2023).<sup>1</sup>

Study program	Report length
BACHELOR	7 – 10 pages
MASTER	12 – 15 pages

Table 1: Length of reports in number of pages according to the study program.

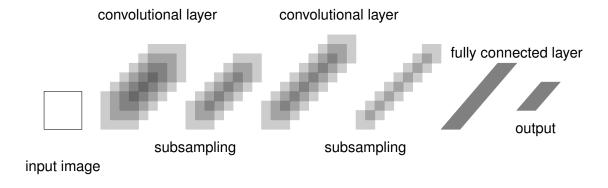


Figure 1: Architecture of a convolutional neural network by LeCun et al. (1989). This network has two convolutional layers, each followed by a subsampling layer. A fully connected layer precedes the output layer. The latex code for this image was adapted from (Stutz, 2020).

<sup>&</sup>lt;sup>1</sup>Please avoid using footnotes.

### 3 CONCLUSION

This template should help you get started with your report. Place yourself in the reader's shoes and consider what your reader wants and needs to know about your report. The quality and clarity of the report are essential, not quantity.

#### References

- Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep learning. MIT press.
- LeCun, Y., Boser, B., Denker, J., Henderson, D., Howard, R., Hubbard, W., & Jackel, L. (1989). Handwritten digit recognition with a back-propagation network. *Advances in neural information processing systems*, *2*.
- Stutz, D. (2020). *Collection of latex resources and examples.* https://davidstutz.de/illustrating-convolutional-neural-networks-in-latex-with-tikz/. ([Online; accessed 22-November-2023])
- Velarde, G. (2023). *Artificial Era: Predictions, Problems, and Diversity in Al.* London: Oxford University Press.