

Template for your posters - Deep Machine Learning

Student1 Studentsson, Student2 Studentsson

Chalmers University of Technology
Electrical Engineering Department



CHALMERS
UNIVERSITY OF TECHNOLOGY

Introduction

This is the template you'll use for your poster. You can add images:



Figure 1: Very relevant image

Lists:

- List item 1
- List item 2
- List item 3
 - Sub-list item 1
 - Sub-list item 2

And pretty much anything you can do in \LaTeX .

Engagement

Make sure to keep your template engaging. To accomplish this, try to:

- Use images and diagrams to attract the reader and illustrate your ideas
- Don't write too much text (like a huge paragraph)
- Make the layout clear and as accessible as possible

For instance, instead of:

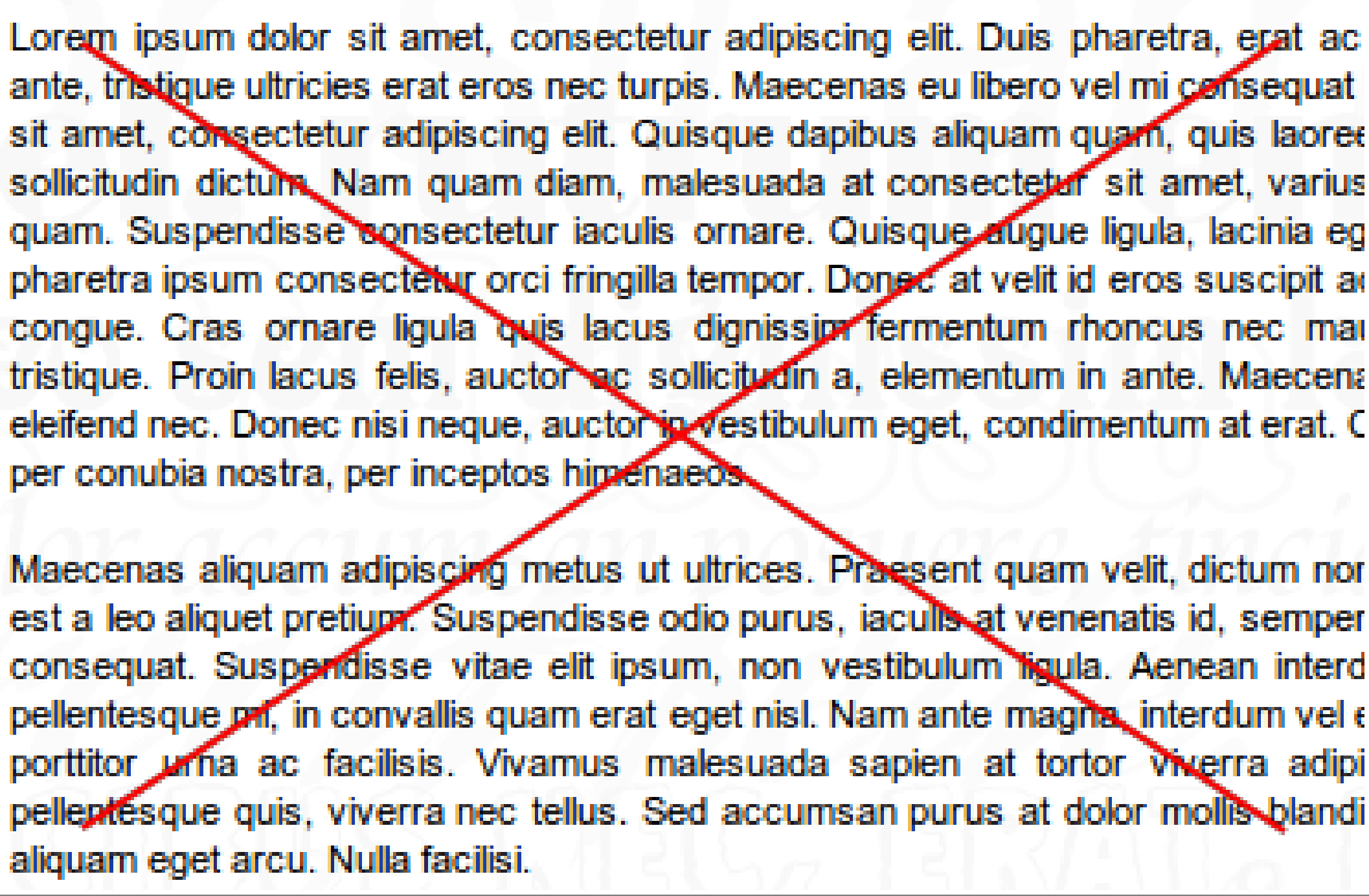


Figure 2: A bad idea for posters...

Find the main points you want to express and use a list

- Lorem
- ipsum
- sit amet
- consectetur

Or even better, use a diagram:



Figure 3: Of course, the diagram needs to be useful.

Other tips

- Feel free to use equations to illustrate your point

$$\sqrt{2} \vee \pi < \oint_{\infty}^i \cosh^{-1}(-\infty) \, d\Gamma \vee \cdots \pm \cosh^{-1}(e\Delta).$$

But make sure not to overdo it. Leave the details for your paper.

- Before you start editing this file, have a clear idea of how you want your poster to look like.
- Think about who's the target audience. Put yourself in their shoes. Amidst several others, would you stop to read your post?

Short example



Figure 4: A catdog

Is this a cat or a dog?

- Pretty easy to tell, right?
- Well, maybe not for a computer...
- Imagine you can only see the 1s and 0s. How can a computer solve this?

Current best approach

- Convolutional neural networks (CNNs)
- Training CNNs requires large amounts of data
- For each data point, we need to know its correct class beforehand

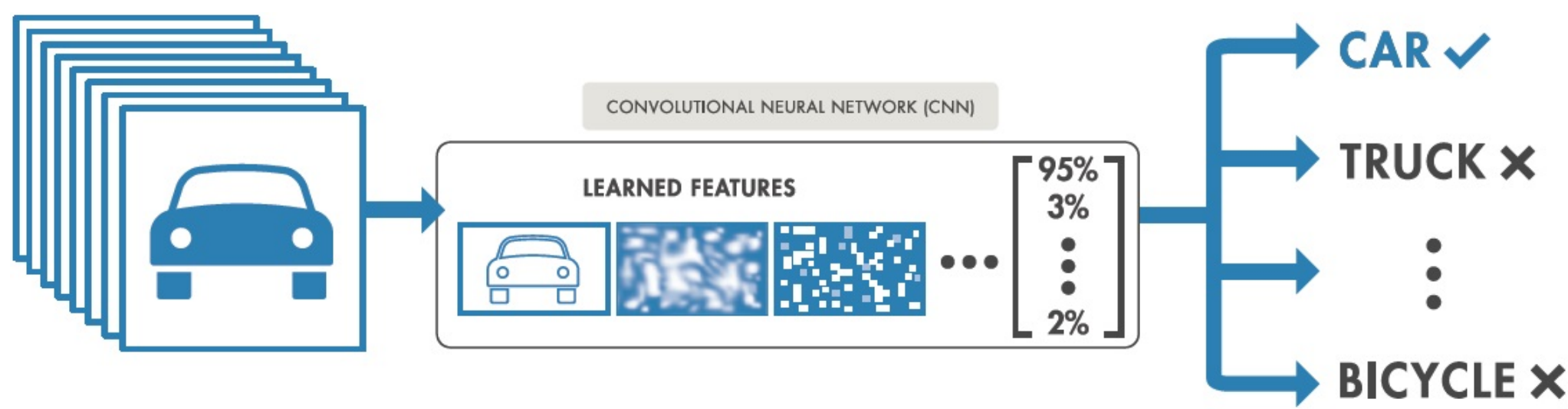


Figure 5: CNN framework

We compare the outputs from the CNN to the desired ones, and adjust its parameterization accordingly, using one of many optimization algorithms.

- Used gradient descent[1] for optimization
- Kaggle dataset of Cats vs Dogs [2] (25k images of cats and dogs)
- Achieved accuracy of more than 90% on new images!

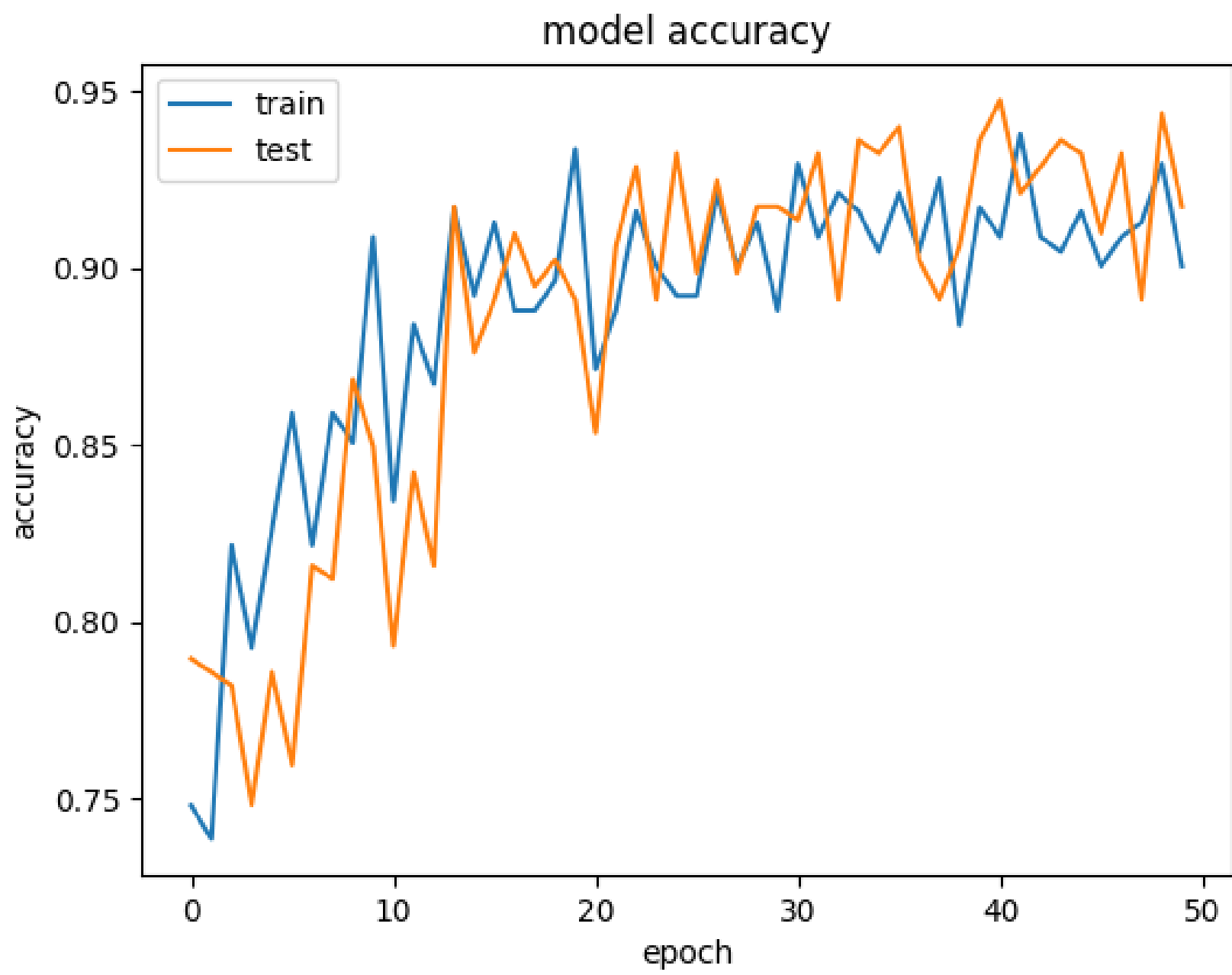


Figure 6: Caption

References

- [1] P. Marjamäki.
IMAGING OF DOPAMINE AND SEROTONIN TRANSPORTERS.
PhD thesis, Turun Yliopisto University of Turku, 2011.
- [2] S. O. Ögren and Eriksson.
The role of 5-Ht1A receptors in learning and memory.
Behavioural Brain Research, 195(1):54–77, Dec 2008.