Thesis

Your Name

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Abstract

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Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Contents

Chapter 1

Commentary

This document is an example of how to use the accompanying files as well as some commentary on them. The files are `math_commands.tex` and `notation.tex`. The file `math_commands.tex` includes several useful LaTeX macros and `notation.tex` defines a notation page that could be used at the front of any publication.

We developed these files while writing Goodfellow *et al.* (2016). We release these files for anyone to use freely, in order to help establish some standard notation in the deep learning community.

1.1 Examples

We include this section as an example of some LaTeX commands and the macros we created for the book.

Citations that support a sentence without actually being used in the sentence should appear at the end of the sentence using `citep`:

> Inventors have long dreamed of creating machines that think. This desire dates back to at least the time of ancient Greece. The mythical figures Pygmalion, Daedalus, and Hephaestus may all be interpreted as legendary inventors, and Galatea, Talos, and Pandora may all be regarded as artificial life (Ovid and Martin, 2004; Sparkes, 1996; Tandy, 1997).

When the authors of a document or the document itself are a noun in the sentence, use the `citet` command:

> Mitchell (1997) provides a succinct definition of machine learning: "A computer program is said to learn from experience E with respect to some class of tasks T and performance measure P, if its performance at tasks in T, as measured by P, improves with experience E."

When introducing a new term, using the `newterm` macro to highlight it. If there is a corresponding acronym, put the acronym in parentheses afterward. If your document includes an index, also use the `index` command.

> Today, **artificial intelligence** (AI) is a thriving field with many practical applications and active research topics.

Sometimes you may want to make many entries in the index that all point to a canonical index entry:

> One of the simplest and most common kinds of parameter norm penalty is the squared L^2 parameter norm penalty commonly known as **weight decay**. In other academic communities, L^2 regularization is also known as **ridge regression** or **Tikhonov regularization**.

To refer to a figure, use either `figref` or `Figref` depending on whether you want to capitalize the resulting word in the sentence.

> See figure 1.1 for an example of a how to include graphics in your document. Figure 1.1 shows how to include graphics in your document.

Similarly, you can refer to different sections of the book using `partref`, `Partref`, `secref`, `Secref`, etc.

> You are currently reading section 1.1.
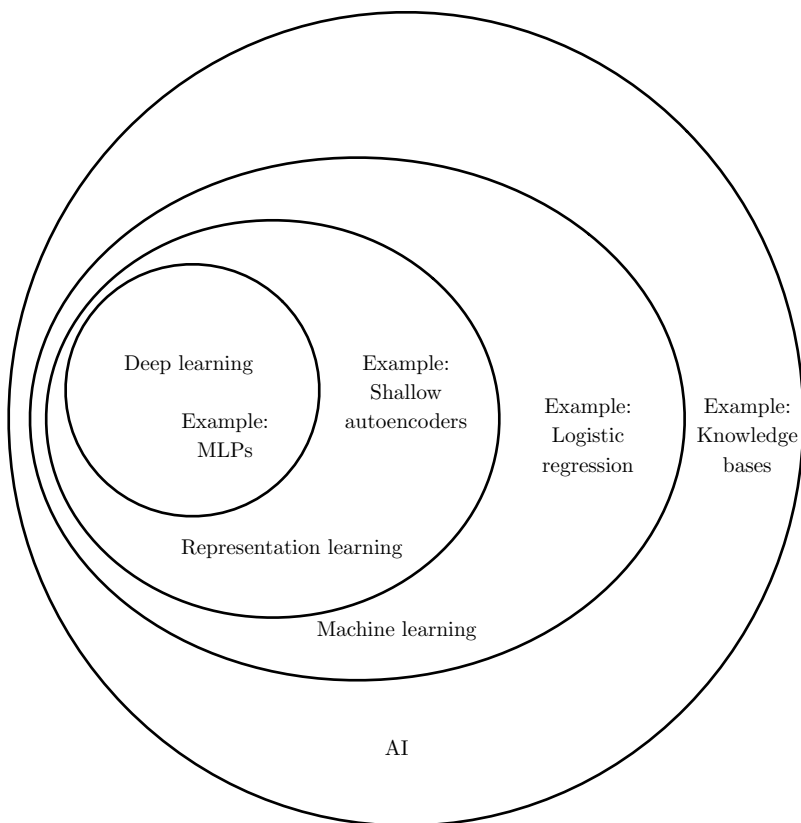
Figure 1.1: An example of a figure. The figure is a PDF displayed without being rescaled within LaTeX. The PDF was created at the right size to fit on the page, with the fonts at the size they should be displayed. The fonts in the figure are from the Computer Modern family so they match the fonts used by LaTeX.

Bibliography

Goodfellow, I., Bengio, Y., and Courville, A. (2016). *Deep Learning*. MIT Press. 1

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Sparkes, B. (1996). *The Red and the Black: Studies in Greek Pottery*. Routledge. 1

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