Todo list

Abstract

This document will contain different latex syntax examples which can be used for the bachelor thesis.

Bachelor Thesis

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Contents

Chapter 1

Graphics

This will contain examples of how to handle graphics

Add better graphics

1.1 Image caption

Figure 1.1: A picture of a monkey

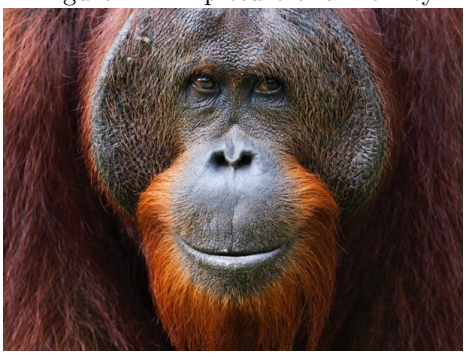

Figure 1.2: A picture of a monkey

Figure 1.3: Comparison of monkey from figure 1.2 and 1.1

Figure 1.4: Monkey one

Figure 1.5: Monkey two

Chapter 2

Reference to image

As seen in figure 1.2, the monkey is very handsome

Chapter 3

Reference to page containing the image

This handsome monkey can be found on page **??**

Chapter 4

Section, subsection, subsubsection, paragraph, subparagraph

4.1 This is a numbered section

This is a non-numbered section

Chapter 5

Lists

Add more items to lists

5.1 Bullet points

- This is a normal bullet point
- Slighty different dash
* Asterisk bullet point

5.2 Numbered lists

5.2.1 Numbers

1) One
2) Two
3) Three

5.2.2 Roman numerals

(i) One
(ii) Two
(iii) Three

5.2.3 Letters

a) One
b) Two
c) Three

Chapter 6

Table with multiple columns

6.1 Various horizontal alignments in columns (left, right, centered), descriptions and labels, reference

In this section we will look a tables, and table 6.1 shows population of orangutan species[**sen2005cute**]

Scientific name	**Common name**	**Estimated number**
Pongo abelii	Sumatran orangutan	14,613
Pongo tapanuliensis	Tapanuli orangutan	<800
Pongo pygmaeus	Bornean orangutan	>53,960

Table 6.1: Population of different orangutan species

6.2 Cell spanning multiple columns

first column	second column	third column
Cell spanning three columns		

6.3 Vertical alignment in multi-line cells

Column 1	Column 2	Column 3
Double row	Upper 2 Lower 2	Upper 3 Lower 3

Chapter 7

Code listing

[**sen2005cute**]

```
import numpy as np

def incmatrix(genl1,genl2):
    m = len(genl1)
    n = len(genl2)
    M = None #to become the incidence matrix
    VT = np.zeros((n*m,1), int)  #dummy variable

    #compute the bitwise xor matrix
    M1 = bitxormatrix(genl1)
    M2 = np.triu(bitxormatrix(genl2),1)

    for i in range(m-1):
        for j in range(i+1, m):
            [r,c] = np.where(M2 == M1[i,j])
            for k in range(len(r)):
                VT[(i)*n + r[k]] = 1;
                VT[(i)*n + c[k]] = 1;
                VT[(j)*n + r[k]] = 1;
                VT[(j)*n + c[k]] = 1;

                if M is None:
                    M = np.copy(VT)
                else:
                    M = np.concatenate((M, VT), 1)

                VT = np.zeros((n*m,1), int)

    return M
```

Chapter 8

Bibliography with book, article and internet link

Citing examples: Book Here[1] Article here[2] Internet link here[3]

Chapter 9

Some kind of todo notes

Bibliography

[1] Paul Adrien Maurice Dirac. *The Principles of Quantum Mechanics*. International series of monographs on physics. Clarendon Press, 1981. ISBN: 9780198520115.

[2] Albert Einstein. "Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]". In: *Annalen der Physik* 322.10 (1905), pp. 891–921. DOI: http://dx.doi.org/10.1002/andp.19053221004.

[3] Wikipedia. *Orangutan population*. URL: https://en.wikipedia.org/wiki/Orangutan#Conservation. (accessed: 19.10.2020).