Title

Author

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Preface

Preface goes here.....

Acknowledgments

Acknowledgments goes here.....

<div align="center">

Author
Place
Date

</div>

Abstract

Abstract goes here.....

Publications

List of appended publication goes here.....

- S. Author, "Some Nice Paper," in in Formal Methods for Writing a Thesis: Proceedings of the 6th International Conference on Example Papers, ICEP 2004, Grimstad, Norway, 2022, pp. 314–317. doi: 00.0000/000.

Contents

List of Figures

List of Tables

Chapter 1

Introduction

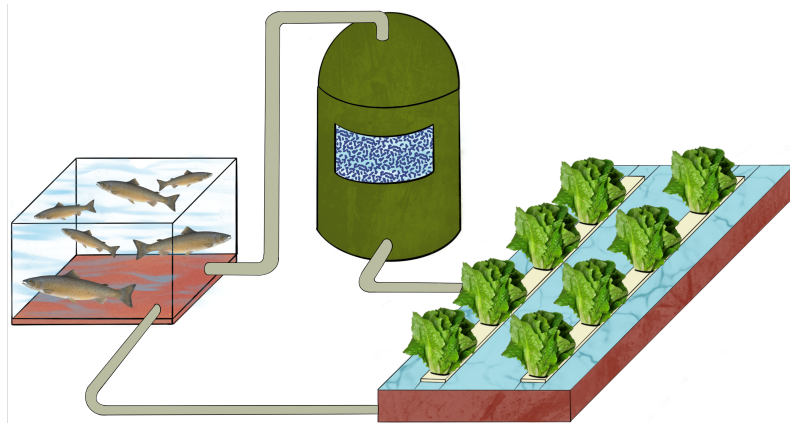This is an example of figure with **caption** and *label*

Figure 1.1: Picture or figure

And here is an example of a table with caption and **_label_**

Table 1.1: Model notation

Notation	Variable	Units
$x^{(i)}_{NH_x-N}$	NH_x-N concentration in tank $i \in \{1,2\}$	$g\,L^{-1}$
$x^{(i)}_{NO_3-N}$	NO_3-N concentration in tank $i \in \{1,2\}$	$g\,L^{-1}$
$x_{NH_x-N,exc}$	NH_x-N concentration from fish feaces	$g\,L^{-1}$
$x_{NH_x-N,hyd}$	NH_x-N concentration from hydroponics	$g\,L^{-1}$

Here is a tip: You may use code-generators like www.tablesgenerator.com/ to create latex-like tables

You may write inline equations like $R(s_t, a_t) = E_{s_t \sim P_s, a_t \sim \pi}[r(s_t, a_t)]$. Also, This is an equation in math-mode

$$x_{k+1} = Ax_k + Bu_k + \omega_k. \tag{1.1}$$

In case you need more than one line to write an equation, here is an example

$$x_{k+1} = Ax_k + Bu_k + \omega_k,$$
$$y_k = Cx_k + \nu_k. \tag{1.2}$$

Here are some matrices and vectors,

$$\boldsymbol{n}(\boldsymbol{x}) = \begin{bmatrix} 0, & -\dfrac{2\mu_{max}[\boldsymbol{x}]_2}{\mu_{max}+2[\boldsymbol{x}]_2}\dfrac{1}{V_2}, & 0, & \dfrac{2\mu_{max}[\boldsymbol{x}]_2}{\mu_{max}+2[\boldsymbol{x}]_2}\dfrac{1}{V_2} \end{bmatrix}^T,$$

$$\boldsymbol{A} = \begin{bmatrix} -\dfrac{Q}{V_1}-\dfrac{Q_{exc}}{V1} & \dfrac{Q}{V_1} & 0 & 0 \\ \dfrac{Q}{V_2} & -\dfrac{Q}{V_2} & 0 & 0 \\ 0 & 0 & -\dfrac{Q}{V_1}-\dfrac{Q_{exc}}{V1} & \dfrac{Q}{V_1} \\ 0 & 0 & \dfrac{Q}{V_2} & -\dfrac{Q}{V_1} \end{bmatrix},$$

$$\boldsymbol{B} = \begin{bmatrix} \dfrac{1}{V_1} & 0 & 0 & 0 \\ 0 & 0 & \dfrac{1}{V_1} & 0 \end{bmatrix}^T, \boldsymbol{C} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 \end{bmatrix}.$$

Remember that equations follow writing rules too, treat them as phrases or paragraphs.

Chapter 2

Background Theory

Next chapter goes here....

2.1 Mathematical background

This is a section

2.1.1 Model A

This is a subsection

2.1.1.1 Details about model A

This is a subsubsection

Chapter 3

Simulations

3.1 Lists

You may create list as:

- Item A

- Item B

- Item C

  If you want enumerated list, then use the following command

1. Item A

2. Item B

3. Item C

3.2 References

You may refer to other chapters/sections/subsections in the thesis like 1; for figures, Fig. 1.1; for tables, Table 1.1; And for equations, (1.1), notice there is no need to add eq. or equation before calling the reference. Make sure the object you are referring has a "label" tag.

3.3 Citation and Bibliography

Concerning citations, you may add references in the file "bibliography.bib" and call them like [1]. Here is another multiple citation example [2, 3].The bibliography section is updated automatically. Make sure that the reference has the correct information.

Tip: We recommend to use a reference manager to write the bibliography. In particular, Zotero is our preference to generate BibTex code. Get in touch with the Library if you want more information about how to use reference managers.

3.4 Draft Mode

This template comes with draft mode, so you may write TODO comments in the document .

To enable draft mode and TODO comments, type **draft** instead of **final** when you define the document class in thesis.tex, i.e. "documentclass[12pt, **draft**]..." instead of "documentclass[12pt, **final**]..."

IMPORTANT REMARK: Before delivering the final version, make sure that the document is in 'final mode' instead of 'draft mode'!

Chapter 4

Concluding Remarks

Check out examples of UiA-like doctoral thesis in the link ADDLINK. Also, you may find a quick-guide in overleaf.com/...

Bibliography

[1] Luis M. Lopez-Ramos, Daniel Romero, Bakht Zaman, and Baltasar Beferull-Lozano. Dynamic network identification from non-stationary vector autoregressive time series. *arXiv:1807.02013 [eess]*, July 2018.

[2] Dimitri P Bertsekas. *Reinforcement learning and optimal control*. Athena Scientific, Belmont, MA, 2019.

[3] Fernando Gama, Joan Bruna, and Alejandro Ribeiro. Stability of Graph Neural Networks to Relative Perturbations. *arXiv:1910.09655 [cs, eess, stat]*, October 2019. arXiv: 1910.09655.