Propositions

accompanying the dissertation

My Thesis

by

Patrick Altmeyer

1. Quarto is the most superior form of scientific publishing.
2. Julia is the most superior form of scientific computing.
3. Counterfactual explanations are the most intuitive way to explain opaque machine learning models [@altmeyer2023explaining].

My Thesis

My Thesis

Dissertation

for the purpose of obtaining the degree of doctor
at Delft University of Technology
by the authority of the Rector Magnificus, Prof. dr. ir. T.H.J.J. van der Hagen,
Chair of the Board for Doctorates
to be defended publicly on
Tuesday 20, June 2025 at 10:00 o'clock

by

Patrick ALTMEYER

MSc, University of Research, Country
born in Amsterdam, The Netherlands

This dissertation has been approved by the promotors.

Composition of the doctoral committee:

Rector Magnificus,	chairperson
Prof. dr. A. Kleiner	Delft University of Technology, *promotor*
Dr. A.A. Aaronson	Delft University of Technology, *copromotor*
Prof. dr. ir. A.B.C.D. van de Lange-Achternaam	Delft University of Technology
Independent members:	
Prof. dr. A. Jansen	Delft University of Technology
Prof. dr. ir. A.B.C.D. van de Lange-Achternaam	Delft University of Technology
Prof. dr. N. Nescio	Politecnico di Milano, Italy
Prof. dr. ir. J. Doe	Delft University of Technology, reserve member
Other members:	
Prof. dr. ir. J. de Wit	Delft University of Technology
Dr. ir. Q. de Zwart	Delft University of Technology

This is an optional message to acknowledge partner institutes.

Keywords: Quarto, Extension, Template

Printed by:

Cover by:

The author set this thesis using Quarto: https://github.com/quarto-tudelft.

ISBN 000-00-0000-000-0

An electronic copy of this dissertation is available at
https://repository.tudelft.nl/.

They not like us.

Kendrick Lamar

TABLE OF CONTENTS

Preface **xi**

Summary **xiii**

Samenvatting **xv**

1 Introduction **1**

2 Guide **3**
2.1 Format Options 3
2.1.1 TU Delft Logo Inclusion 4
2.1.2 Multiple Institute Logos 4
2.1.3 Example YAML Configuration 5

3 Cool Quarto Things **7**
3.1 Custom Callouts 7

References **9**

PREFACE

> **Note**
>
> Preface goes here. This chapter is optional.

This is the TU Delft dissertation template for Quarto use the book project type. To learn more about Quarto books visit https://quarto.org/docs/books.

The template uses the `quarto-tudelft` extension for formatting. The extension itself is adapted from a LaTeX template that can be found at GitLab: novanext/tudelft-dissertation.

Algorithm **??**

SUMMARY

In summary, this book has no content whatsoever.

SAMENVATTING

1

INTRODUCTION

This is a book created from markdown and executable code.

2

GUIDE

2.1. FORMAT OPTIONS

This extension provides several variables to customize your thesis title page:

Variable	Description	Example
`title`	Title of your dissertation	"My Doctoral Dissertation"
`subtitle`	Optional subtitle	"A Study of Something Important"
`author`	Full name of the author	"Jane Doe"
`author-degree`	Highest academic title, university, country	"MSc, University of Research, Country"
`author-birthplace`	Town/city and country of birth	"Amsterdam, The Netherlands"
`defense-date`	Date and time of the defense	"Tuesday 20, June 2025 at 10:00 o'clock"
`rector`	Name of the Rector Magnificus	"prof. dr. ir. A. B. Example"
`committee`	List of committee members	See example below
`independent-members`	List of independent members	See example below
`other-members`	List of other members	See example below
`contributors`	List of committee members who contributed to the dissertation	See example below
`keywords`	Keywords describing the research	"keyword1, keyword2, keyword3"
`printed-by`	Printing company information	"University Press"
`cover-by`	Cover design credit	"Jane Smith"

Variable	Description	Example
`copyright-year`	Year of copyright	"2025"
`phd-series`	PhD series information if applicable	"Casimir PhD Series, Delft-Leiden 2025-01"
`isbn`	ISBN number	"978-90-8593-000-0"
`repository-url`	URL to the electronic version	"https://repository.tudelft.nl/"

2.1.1. TU Delft logo inclusion

The extension automatically includes the TU Delft logo by default. You can control this behavior:

```yaml
# Include the TU Delft logo (default: true)
institute-logo-tudelft: true

# Add additional logos
institute-logos:
  - path: "images/partner-institute-logo.png"
  - path: "images/another-institute-logo.png"
```

To disable the automatic inclusion of the TU Delft logo:

```yaml
institute-logo-tudelft: false
```

When providing your own logos, the TU Delft logo (if enabled) will always appear first, followed by your specified logos.

2.1.2. Multiple institute logos

To include multiple logos of institutions that contributed to your research:

```yaml
institute-logos:
  - path: "images/tudelft-logo.png"
    spacing: "1.5cm"  # Optional spacing between logos
  - path: "images/partner-institute-logo.png"
```

Alternatively, for a single logo, you can use the simpler syntax:

```yaml
institute-logo: "images/tudelft-logo.png"
```

2.1.3. Example YAML configuration


```yaml
---
title: "My Doctoral Dissertation"
subtitle: "A Study of Something Important"
author: "Jane Doe"
author-degree: "MSc, University of Research, Country"
author-birthplace: "Amsterdam, The Netherlands"
defense-date: "Tuesday 20, June 2025 at 10:00 o'clock"
rector: "prof. dr. ir. A. B. Example"

# Committee members
committee:
  - title: "Prof. dr. A. Kleiner"
    affiliation: "Delft University of Technology"
    role: "promotor"
  - title: "Dr. A.A. Aaronson"
    affiliation: "Delft University of Technology"
    role: "copromotor"

independent-members:
  - title: "Prof. dr. A. Jansen"
    affiliation: "Delft University of Technology"
  - title: "Prof. dr. ir. A.B.C.D. van de Lange-Achternaam"
    affiliation: "Delft University of Technology"
    name-too-long: true  # Use this for names that need to be on their own line
  - title: "Prof. dr. N. Nescio"
    affiliation: "Politecnico di Milano, Italy"
  - title: "Prof. dr. ir. J. Doe"
    affiliation: "Delft University of Technology"
    role: "reserve member"

other-members:
  - title: "Prof. dr. ir. J. de Wit"
    affiliation: "Delft University of Technology"
  - title: "Dr. ir. Q. de Zwart"
    affiliation: "Delft University of Technology"

# Contributors to dissertation
contributors:
  - title: "Prof. dr. ir. J. de Wit"
    affiliation: "Delft University of Technology"

# Institute logos (choose one approach)
institute-logos:
```

```
  - path: "images/tudelft-logo.png"
    spacing: "1.5cm"
  - path: "images/partner-institute-logo.png"

# Publication details
keywords: "keyword1, keyword2, keyword3"
printed-by: "University Press"
cover-by: "Jane Smith, featuring an abstract representation of the research to
isbn: "978-90-8593-000-0"

format:
  tudelft-thesis-pdf: default
---
```

3

COOL QUARTO THINGS

3.1. CUSTOM CALLOUTS

The template adds custom numbered blocks using the embedded ute/custom-numbered-blocks extension, which supports HTML and PDF with non-standard cross-references (i.e. `\ref{}` syntax). We provide two custom numbered blocks:

We provide two custom numbered blocks:

1. **TRQ** for Thesis Research Questions
2. **RQ** for Research Questions
3. **Rec** for Recommendations

TRQ 3.1 is an example of a Thesis Research Question; RQ 3.1 is an example of a Research Questions; Rec. 3.1 is an example of a recommendation.

Thesis Research Question 3.1: What is a TRQ?

This is a Thesis Research Question, that you might want to use in the introduction of your thesis.

Research Question 3.1: What is a RQ?

This is a Research Question, that you might want to use in any chapter of your thesis.

Recommendation 3.1: What is a Rec?

This is a Recommendation that you might want to use in the conclusion of your thesis.

REFERENCES