



UNIVERSITÀ DEGLI STUDI DI NAPOLI
FEDERICO II

Scuola Politecnica e
delle Scienze di Base



Università degli Studi di Napoli Federico II
Dottorato di Ricerca in
Ingegneria Strutturale, Geotecnica e Rischio Sismico

THESIS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Title First Row
Title Second Row
by
GIVEN_NAME FAMILY_NAME

Advisor: Prof. X Y

Co-advisor: Prof. W Z



SCUOLA POLITECNICA E DELLE SCIENZE DI BASE
DIPARTIMENTO D STRUTTURE PER L'INGEGNERIA E L'ARCHITETTURA

Dedication

or

Somee quote

Title First Row
Title Second Row

Ph.D. Thesis presented
for the fulfillment of the Degree of Doctor of Philosophy
in Ingegneria Strutturale, Geotecnica e Rischio Sismico
by
GIVEN_NAME FAMILY_NAME

February 2023



Approved as to style and content by

Prof. X Y, Advisor

Prof. W Z, Co-advisor

Università degli Studi di Napoli Federico II
Ph.D. Program in Ingegneria Strutturale, Geotecnica e Rischio Sismico
XXXV cycle - Chairman: Prof. Iunio Iervolino



www.dist.unina.it/dottorati-di-ricerca/dottorati

Candidate's declaration

I hereby declare that this thesis submitted to obtain the academic degree of Philosophiæ Doctor (Ph.D.) in Ingegneria Strutturale, Geotecnica e Rischio Sismico is my own unaided work, that have not used other than the sources indicated, and that all direct and indirect sources are acknowledged as references.

Parts of this dissertation have been published in international journals and/or conference proceedings (see list of the author's publications at the end of the thesis).

Napoli, February 16, 2023

Given_name Family_Name

Abstract

According to the PhD program regulations, theses are written in English. An abstract and keywords are mandatory, both in English and in Italian. Try to make each fit on one page.

Start with a short paragraph setting up the context. Move to a motivation paragraph for your research, synthetically explaining the problem you targeted. State the original contribution(s).

The abstract is followed by a list of four to six keywords. To be relevant and effective for indexing purposes, keywords must be chosen carefully.

The PhD thesis is expected to present original research contributions developed during the PhD studies of the candidate. The thesis, as well as the research work, is developed under the guidance of a supervisor.

The thesis may include previously published work by the candidate, provided that the previously published material is cited appropriately in the thesis and the contribution of the author is clarified. Materials derived from the work of other authors must be properly referenced in the thesis and, if the exact words are reported, they must be cited in quotes.

According to the national legislation, all PhD theses are deposited at the National Libraries of Rome and Florence, where they can be consulted locally. The University takes care of the deposit into the National libraries. The candidates admitted to the final exam must deposit their thesis electronically before the final exam; the University stores and after the defense makes publicly available the electronic copy of the thesis through the federated open fedOAtd archive, where all theses are indexed and listed. Before depositing the thesis, the candidate may ask the PhD Board - through the PhD program Chairman - to determine restricted access to (parts of) the thesis, possibly setting a time limit, on the basis of motivated needs related to the use of data protected by trade or industrial secrets, according to the current national legislation.

Keywords: list from, four to six, keywords, separated by commas.

Sintesi in lingua italiana

La tesi di dottorato è redatta in lingua inglese. La tesi deve essere corredata da una sintesi (abstract) in lingua inglese e in lingua italiana.

Cercare di limitare ciascuna sintesi ad una pagina.

L'abstract è seguito da una lista da quattro a sei parole chiave. Le parole chiave devono essere scelte accuratamente per l'efficacia dell'indicizzazione e delle ricerche nelle banche dati.

La tesi è valutata da almeno due docenti di elevata qualificazione, anche appartenenti a istituzioni estere, esterni ai soggetti che concorrono al rilascio del titolo di dottorato (valutatori).

I valutatori esprimono un giudizio analitico scritto sulla tesi e ne propongono l'ammissione alla discussione pubblica o il rinvio per un periodo non superiore a sei mesi se ritengono necessarie significative integrazioni o correzioni.

Trascorso il periodo di rinvio fissato dai valutatori, la tesi è in ogni caso ammessa alla discussione pubblica, corredata dal nuovo parere scritto dei medesimi valutatori. Il rinvio comporta l'obbligo di integrare e/o correggere la tesi e non determina un prolungamento della durata del corso di dottorato.

I candidati all'esame finale di dottorato devono depositare la propria tesi nel sistema di Ateneo fedOAtD. L'archivio garantisce la non consultabilità on line di tutte le tesi ivi depositate e non ancora discusse.

L'Università entro trenta giorni dalla discussione e approvazione della tesi deposita copia della stessa, in formato elettronico, nella banca dati ministeriale.

L'Università, inoltre, archivia e rende consultabile in rete il testo completo della tesi di dottorato attraverso l'Archivio istituzionale ad accesso aperto fedOAtD e cura il deposito della tesi stessa presso le biblioteche nazionali di Roma e di Firenze.

Previa autorizzazione del Collegio dei Docenti, possono essere rese indisponibili, eventualmente anche fissando un limite temporale, parti della tesi in relazione all'utilizzo di dati tutelati da segreto industriale ai sensi della normativa vigente in materia.

Parole chiave: da quattro, a sei, parole chiave, separate da virgola.

Contents

Abstract	i
Sintesi in lingua italiana	ii
Contents	iii
Acknowledgements	v
List of Acronyms	vii
List of Figures	ix
List of Tables.....	xi
List of Symbols.....	xiii
Introduction	1
Title, e.g.: Background and related work	1
2.1 Section title	1
2.1.1 Subsection title	1
2.1.2 Subsection title	4
2.2 Section title	5
2.2.1 Subsection title	5
2.2.2 Subsection title	5
2.2.3 Subsection title	6
Title of chapter 3	7

3.1	Section title	7
3.1.1	Subsection title	7
3.1.2	Subsection title	7
Title of chapter 4.....		9
4.1	Section title	9
4.1.1	Subsection title	9
Conclusions.....		11
Bibliography		13
Author's publications		15

Acknowledgements

Put acknowledgements here, e.g. to fundings (PON, company-funded scholarship, EU project, INPS Dottorati innovativi Intersectoriali “Industria 4.0”, etc.), to hosting labs, to used resources, to foreign hosting institutions for research periods spent abroad, etc.

Examples:

The research presented in this dissertation has been supported by the Italian Ministry of University and Research (MUR) under program PON 2014-2020 ...

The author’s work has been supported by a PhD scholarship funded by ... company name ...

The author’s work has been carried out in the framework of the PRIN 2018 (Progetti di Rilevante Interesse Nazionale) project “Project Title”, grant nr. ...

The author’s work has been partially carried out in the framework of the European Union project of the Horizon program “PROJECT ACRONYM

- Title”, grant nr. ...

List of Acronyms

The following acronyms are used throughout the thesis.

ML	Machine Learning
RQ	Research Question

List of Figures

Figure 2.1. Figure caption goes below the figure.....	4
---	---

List of Tables

Table 2.1. Table caption goes above the table.	4
---	---

List of Symbols

The following symbols are used within the thesis

c	Speed of light in a vacuum
h	Planck constant

Introduction

Experience is the hardest kind of teacher: it gives you the test first and the lesson afterward.

Oscar Wilde

The thesis page format is B5, double side.

Chapters start at odd page numbers (right pages). Optionally, an epigraph may be added like above.

...

Just an example of how to conclude the introduction:

The rest of the thesis is structured as follows.

Chapter 1 introduces ...

Chapter 2 presents ...

Chapter 3 ...

Chapter 4 ...

Chapter 5 summarizes ...

next page left empty if this is an odd page

Chapter 2

Title, e.g.: Background and related work

Experience is the hardest kind of teacher: it gives you the test first and the lesson afterward.

Oscar Wilde

Chapters start at odd page numbers (right pages). Optionally, an epigraph may be added like above.

Previous page left empty if previous chapter ends with odd page number.

Text continues.

Text

This chapter presents ...

2.1 Section title

2.1.1 Subsection title

Text

Text



Figure 2.1. Figure caption goes below the figure.

2.1.2 Subsection title

Sample text with reference to Figure 2.1.

Text with citation to ref. [1].

Subsubsection title (no numbering)

Sample text with reference to Table 2.1.

Text

Table 2.1. Table caption goes above the table.

Name	Command
Chapter	<code>\chapter{Chapter name}</code>
Section	<code>\section{Section name}</code>
Subsection	<code>\subsection{Subsection name}</code>
Subsubsection	<code>\subsubsection{Subsubsection name}</code>
Paragraph	<code>\paragraph{Paragraph name}</code>
Subparagraph	<code>\paragraph{Subparagraph name}</code>

Subsubsection title

Left page of a chapter (even page number) - note the page heading

2.2 Section title**2.2.1 Subsection title**

Right page of a chapter (odd page number) - note the page heading

Text

Subsubsection title (no numbering)

Text

2.2.2 Subsection title

Text

Example of itemization:

- Item 1 text
- Item 2 text
- Item 3 text
- Item 4 text

Subsubsection title (no numbering)

Text

Example of enumeration:

1. Item 1 text
2. Item 2 text

3. Item 3 text

4. Item 4 text

Text

2.2.3 Subsection title

Text

Text

Chapter 3

Title of chapter 3

Chapters start at odd page numbers (right pages).

Previous page left empty if previous chapter ends with odd page number.

3.1 Section title

3.1.1 Subsection title

Text

Text

Subsubsection title

Text

Text

Text

Text

3.1.2 Subsection title

Text

Text

Text

Chapter 4

Title of chapter 4

Chapters start at odd page numbers (right pages).

Previous page left empty if previous chapter ends with odd page number.

4.1 Section title

4.1.1 Subsection title

Subsubsection title

Conclusions

Text

Bibliography

- [1] D.E. Knuth. The errors of TEX. *Software: Practice and Experience*, 19(7), 1989.

Author's publications

Insert here the list of your scientific publications during the PhD, e.g.:

1. D.E. Knuth. The errors of TEX. Software: Practice and Experience, 19(7), 1989. DOI: 10.1002/spe.4380190702.
2. D.E. Knuth. Structured Programming with go to Statements, ACM Computing Surveys, 6(4), 261-301, 1974. DOI: 10.1145/356635.356640.

