## **TypXidian**

A template for academic documents written in Typst



#### **SUPERVISORS**

**CANDIDATE** 

Prof. Mario Rossi

Giuseppe Verdi

Prof. Mario Bianchi

Faculty of Science
Departmenent of Computer Science
Master's Degree in Machine Learning & Data Science
University of Salerno

Academic year 2025/2026

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

- John Doe

## abstract

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet, ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum defuturum, quas natura non depravata desiderat. Et quem ad me accedis, saluto: 'chaere,' inquam, 'Tite!' lictores, turma omnis chorusque: 'chaere, Tite!' hinc hostis mi Albucius, hinc inimicus. Sed iure Mucius.

## **Table of Contents**

abstract	i
Table of Contents	ii
List of Figures	iii
List of Definitions	iv
List of Theorems	$\mathbf{v}$
List of Abbreviations	vi
1 Introduction	1
1.1 Cover Page	1
1.2 Abstract & Citation	1
1.3 Links, Citations and Refs Colors	2
1.4 Additional Content	2
2 Figures, Tables, Paragraphs and Equations	3
2.1 Subfigures	3
2.2 No number Equations	3
2.3 Paragraphs	4
3 Callouts, Definitions, Theorems & Proofs	5
4 Showcase	7
4.1 Subsection	7
4.1.1 Subsubection	8
Bibliography	9

## List of Figures

														_
Figure 9.1	This is a figure with	gubfigures												- 3
riguit 2.1	This is a figure with	subligutes.							 					·

## List of Definitions

Definition. 3.1 Definition							 									6

## List of Theorems

Theorem 3.1 Theorem	 	 	 	 	 				 	6

## List of Abbreviations

 $\mathbf{A}$ 

AI Artificial Intelligence

 $\mathbf{M}$ 

ML Machine Learning

### 1 Introduction

TypXidian is a template for academic writing, such as theses, dissertations, and reports.

TypXidian comes with custom environments inspired by <u>Obsidian</u> callout boxes. Some of the environments and styling choices, such as: headers and citation style, are inspired by [Sca24].

The purpose of this document is to act both as a showcase of the template and as documentation. TypXidian also comes with the following packages:

- cetz:0.4.2
- booktabs:0.0.4
- wrap-it:0.1.1
- subpar:0.2.2
- headcount:0.1.0
- fontawesome:0.6.0
- decasify:0.10.1
- a custom version of acrostiche:0.6.0

You may directly use any function available in these packages .

#### 1.1 Cover Page

The cover page supports two display modes:

- Authors-only view: for reports, notes, or shorter projects;
- Supervisors + authors view: for theses or dissertations.

You can switch between them by setting the supervisors parameter. If you pass an empty list (the default), the supervisors section will be hidden.

Additional metadata parameters include:

- university: name of the university;
- logo: university logo (defaults to src/preview/figures/logo.svg);
- academic-year: the academic year, e.g. 2024/2025 (defaults to none);
- faculty: the faculty name (defaults to none);
- department: the department name (defaults to none);
- degree: the degree program (defaults to none);
- is-thesis: if true, the "AUTHOR(S)" label changes to "CANDIDATE(S)" (defaults to false).

#### 1.2 Abstract & Citation

By setting the abstract and citation parameters, the template adds two additional pages before the table of contents.

Introduction

The citation page does **not** appear in the table of contents.

#### 1.3 Links, Citations and Refs Colors

You may customize the links, citations and refs colors by respectively setting the link-color, citation-color and ref-color.

#### 1.4 Additional Content

You may inject content directly via parameters:

- before-content: material inserted between the abstract/citation and the table of contents (defaults to none);
- after-content: material added immediately after the table of contents (defaults to none);

These are useful for dedicatory pages, acknowledgements, or institutional notices.

# 2 | Figures, Tables, Paragraphs and Equations

Figures, tables, paragraphs and equations numbering is dependent on the current chapter. For instance, a figure under the 1st chapter will be numbered as 'Figure 1.X' and so on. On each chapter, the counter resets.

The List of Figures and Tables are dynamic, meaning they will be appear only if there is at least an image or a table in the document.

#### 2.1 Subfigures

To assure consisten numbering of subfigures, you must use the subfigure(..args) function which has the same signature as subpar.grid. For instance, the following code:

```
#subfigure(
  columns: (1fr, 2fr),
  figure(
    image("assets/dog.jpg"),
    caption: [This is a dog.]
),
  <dog>,
  figure(
    image("assets/cat.jpg"),
    caption: [This is a cat.]
),
  <cat>,
  caption: [This is a figure with subfigures.],
  label: <fig:example>
)
will output the Figure 2.1.
```

#### 2.2 No number Equations

In this template, block equations are set to always be numbered. A utility function nonum-eq is available to write non-numbered equations. To use this function, just call it and write a block equation as you normally would:

```
#nonum-eq(  \$ \sinh(x) + \cosh(x) \$  )  \sinh(x) + \cosh(x)
```

Calling nonum-eq will not affect equation numbering:

$$\sinh(x) + \cosh(x) \tag{2.1}$$





(a) This is a dog.

(b) This is a cat.

Figure 2.1: This is a figure with subfigures.

#### 2.3 Paragraphs

The paragraph(title, body) function mimics LaTeX's \paragraph{} command. For instance, the following code:

#paragraph([This is a paragraph], [#lorem(25)])
<par>

will output:

This is a paragraph. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

Paragraphs are also referenceable like any other figure environment: Paragraph 2.1.

# 3 | Callouts, Definitions, Theorems & Proofs

Callouts environment can be used through any of the following functions: info, danger, success, tip, faq.

#### 1 Info

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

$$x + y = \int_0^{\inf} xy dx \tag{3.1}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

#### ? FAQ

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

$$x + y = \int_0^{\inf} xy dx \tag{3.2}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

#### O Tip

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

$$x + y = \int_0^{\inf} xy dx \tag{3.3}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

#### **O** Success

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

$$x + y = \int_0^{\inf} xy dx \tag{3.4}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

#### Danger

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus.

$$x + y = \int_0^{\inf} xy dx \tag{3.5}$$

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do.

For each, you may customize the following parameters:

- title: the title appearing next to the icon.
- icon: the icon of the callout.
- fill: background color.
- title-color: title color.
- supplement: the supplement for references as each callout can be referenced.

Other three custom environments are also available for definitions, theorems and proofs:

**Definition 3.1 (Definition)** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

$$x + y = 1 \tag{3.6}$$

**Theorem 3.1 (Theorem)** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

$$x + y = 1 \tag{3.7}$$

**Proof of Theorem 3.1** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat.

$$x + y = 1 \tag{3.8}$$

For each, you may customize the following parameters:

- title: the title appearing next to the icon.
- stroke-fill: the fill of the column of the left.
- supplement: the supplement for references as each math environment can be referenced.

Definitions and theorems will be listed in the List of Definitions and List of Theorems respectively.

### 4 Showcase

Artificial Intelligence (AI) Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet, ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum defuturum, quas natura non depravata desiderat. Et quem ad me accedis, saluto: 'chaere,' inquam, 'Tite!' lictores, turma omnis chorusque: 'chaere, Tite!' hinc hostis mi Albucius, hinc inimicus. Sed iure Mucius. Ego autem mirari satis non queo unde hoc sit tam insolens domesticarum rerum fastidium. Non est omnino hic docendi locus; sed ita prorsus existimo, neque eum Torquatum, qui hoc primus cognomen invenerit, aut torquem illum hosti detraxisse, ut aliquam ex eo est consecutus? - Laudem et caritatem, quae sunt vitae sine metu degendae praesidia firmissima. – Filium morte multavit. – Si sine causa, nollem me ab eo delectari, quod ista Platonis, Aristoteli, Theophrasti orationis ornamenta neglexerit. Nam illud quidem physici, credere aliquid esse minimum, quod profecto numquam putavisset, si a Polyaeno, familiari suo, geometrica discere maluisset quam illum etiam ipsum dedocere. Sol Democrito magnus videtur, quippe homini erudito in geometriaque perfecto, huic pedalis fortasse; tantum enim esse omnino in nostris poetis aut inertissimae segnitiae est aut fastidii delicatissimi. Mihi quidem videtur, inermis ac nudus est. Tollit definitiones, nihil de dividendo ac partiendo docet, non quo ignorare vos arbitrer, sed ut.

ML. Machine Learning (ML) Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore.

#### 4.1 Subsection

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet, ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum defuturum, quas natura non depravata desiderat. Et quem ad me accedis, saluto: 'chaere,' inquam, 'Tite!' lictores, turma omnis chorusque: 'chaere, Tite!' hinc hostis mi Albucius, hinc inimicus. Sed iure Mucius. Ego autem mirari satis non queo unde hoc sit tam insolens domesticarum rerum fastidium. Non est omnino hic docendi locus; sed ita prorsus existimo, neque eum Torquatum, qui hoc primus cognomen invenerit, aut torquem illum hosti detraxisse, ut aliquam ex eo est consecutus? - Laudem et caritatem, quae sunt vitae sine metu degendae praesidia firmissima. – Filium morte multavit. – Si sine causa, nollem me ab eo delectari, quod ista Platonis, Aristoteli, Theophrasti orationis ornamenta neglexerit. Nam illud

8 Showcase

quidem physici, credere aliquid esse minimum, quod profecto numquam putavisset, si a Polyaeno, familiari suo, geometrica discere maluisset quam illum etiam ipsum.

#### 4.1.1 Subsubection

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim aeque doleamus animo, cum corpore dolemus, fieri tamen permagna accessio potest, si aliquod aeternum et infinitum impendere malum nobis opinemur. Quod idem licet transferre in voluptatem, ut postea variari voluptas distinguique possit, augeri amplificarique non possit. At etiam Athenis, ut e patre audiebam facete et urbane Stoicos irridente, statua est in quo a nobis philosophia defensa et collaudata est, cum id, quod maxime placeat, facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et.

## **Bibliography**

[Sca24] S. Scardapane, "Alice's Adventures in a Differentiable Wonderland – Volume I, A Tour of the Land." [Online]. Available: <a href="https://arxiv.org/abs/2404.17625">https://arxiv.org/abs/2404.17625</a>