SCHOOL OF COMPUTATION, INFORMATION AND TECHNOLOGY — INFORMATICS

TECHNISCHE UNIVERSITÄT MÜNCHEN

Master's Thesis in Data Engineering & Analytics

Enhancing Photovoltaic Detection Using Generative AI for Super-Resolution Satellite Imagery

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Verbesserung der Photovoltaik-Erkennung mittels generativer KI für Super-Resolution-Satellitenbilder

Author: Ziyad Mourabiti Examiner: Supervisor Supervisor: Advisor

Submission Date: Submission date

I confirm that this master's thesis is my own work and and material used.	I have documented all sources
Munich, Submission date	Ziyad Mourabiti



Abstract

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1 Introduction

1.1 Section

Citation test [Lam94].

Acronyms must be added in main.tex and are referenced using macros. The first occurrence is automatically replaced with the long version of the acronym, while all subsequent usages use the abbreviation.

E.g. \ac{TUM} , \ac{TUM} \Rightarrow Technical University of Munich (TUM), TUM For more details, see the documentation of the acronym package¹.

1.1.1 Subsection

See Table 1.1, Figure 1.1, Figure 1.2, Figure 1.3.

Table 1.1: An example for a simple table.

A	В	C	D
1	2	1	2
2	3	2	3



Figure 1.1: An example for a simple drawing.

¹https://ctan.org/pkg/acronym



Figure 1.2: An example for a simple plot.

```
SELECT * FROM tbl WHERE tbl.str = "str"
```

Figure 1.3: An example for a source code listing.

Abbreviations

TUM Technical University of Munich

List of Figures

1.1	Example drawing
1.2	Example plot
1.3	Example listing

List of Tables

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1.1	Example table																		1

Bibliography

[Lam94] L. Lamport. *LaTeX : A Documentation Preparation System User's Guide and Reference Manual.* Addison-Wesley Professional, 1994.