DEPARTMENT OF INFORMATICS

TECHNISCHE UNIVERSITÄT MÜNCHEN

Master's Thesis

Explainability of Fake News Detection Models for Social Media

Batuhan Erdogdu

DEPARTMENT OF INFORMATICS

TECHNISCHE UNIVERSITÄT MÜNCHEN

Master's Thesis

Explainability of Fake News Detection Models for Social Media

Erklärbarkeit von Modellen zur Fake-News-Erkennung in Sozialen Medien

Author:	Batuhan Erdogdu
Supervisor:	Prof. Dr. Georg Groh
Advisor:	M.Sc. Carolin Schuster
Submission Date:	Submission date

I confirm that this master's thesis is my own work and I have documented all sources and material used.

Munich, Submission date					Batuhan Erdogdu

Acknowledgments

Abstract

Contents

1 Introduction

Internet has become a significant part of our society. We can work, attend our lectures, learn the news, even do our job interviews and many more tasks from our homes thanks to the internet. With the rise of the social media. The more people are connected, the wider the information spreads.

1.1 Section

Citation test (Lamport, 1994).

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.

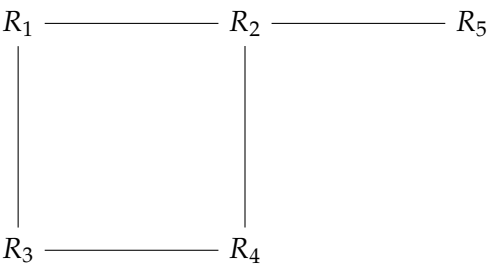| A	B	C	D
1	2	1	2
2	3	2	3

Figure 1.1: An example for a simple drawing.

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.

2 Background

2.1 Fake News

2.1.1 How Fake News Spreads

2.1.2 Impacts of Fake News on Society

2.2 Fake News Detection

2.2.1 Overview

2.2.2 Challenges

2.2.3 Approaches

2.3 Explainable Artificial Intelligence

2.3.1 Why Explainable Artificial Intelligence is needed

2.3.2 What is Explainable Artificial Intelligence

2.3.3 What is a Good Explanation

3 Explainability of Fake News Detection Models

List of Figures

List of Tables

Bibliography

Lamport, L. (1994). *Latex : A documentation preparation system user's guide and reference manual*. Addison-Wesley Professional.