#### **Bachelor Project**



F3

Faculty of Electrical Engineering
Department of Computer Science

#### **Bias Detection in Czech News**

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Supervisor: Ing. Jan Drchal, Ph.D Field of study: Open Informatics

Subfield: Artificial Intelligence and Computer Science

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## **Acknowledgements**

We thank the CTU in Prague for being a very good *alma mater*.

#### **Declaration**

I declare that this work is all my own work and I have cited all sources I have used in the bibliography.

Prague, February 10, 2022

Prohlašuji, že jsem předloženou práci vypracoval samostatně, a že jsem uvedl veškerou použitou literaturu.

V Praze, 10. února 2022

#### **Abstract**

This manual shows how to use the ctuthesis  $\LaTeX$  class, what are the requirements, etc.

**Keywords:** bias detection, transformers, text classification

Supervisor: Ing. Jan Drchal, Ph.D

#### ?abstractname?

Tento mánuál představuje ĽATEXovou třídu ctuthesis, její použití, požadavky na systém atd.

 $\begin{tabular}{ll} \textbf{Keywords:} & bias detekce, transformers, \\ text classification \\ \end{tabular}$ 

### **Contents**

# Figures Tables

# Introduction

This is introduction to my thesis, motivation.

#### 1.1 About bias

Why bias. types of bias, gender, media bias. bias in text, bias in models.

#### 1.2 Gender bias - SOTA

mdgender = classification. stereoset (and others) = mitigating?

- 1.3 Media bias SOTA
- 1.4 Media bias some more in depth info?

Part I

Data

# Current media bias related datasets

- 2.1 Current datasets
- 2.2 BABE dataset
- 2.3 SUBJ dataset
- 2.4 MPQA dataset
- 2.5 WIKI npov dataset
- 2.6 and more

# **Czech datasets**

- **3.1** methodology (translation)
- 3.2 creation of wiki npov data
- 3.3 output āll collected cz bias data

Part II

**Experiments** 

# **Experiments**

- 4.1 Transformer architecture
- 4.2 Czech models
- 4.2.1 RobeCzech,Czert,FERNET
- 4.3 Training

RobeCzech [?]

4.4 Evaluation

Part III

**Application to news corpora** 

# Czech news corpora

- 5.1 Inference on sampled data
- 5.2 Statistics Analysis
- 5.3 Inference on article level?

Chapter 6
Interpretability? Ethics?

# Conclusion

- 7.1 Solutions
- 7.2 future work