

SILESIAN UNIVERSITY OF TECHNOLOGY FACULTY OF AUTOMATIC CONTROL, ELECTRONICS AND COMPUTER SCIENCE

PROGRAMME: INFORMATICS

Master thesis

Title of the Master's Thesis

author: Name Surname

supervisor: Name Surname, DSc PhD

consultant: Name Surname, PhD

Gliwice, November 2021

Contents

A	bstract	1
1	Introduction	3
2	[Problem analysis]	5
3	[Subject of the thesis]	7
4	Experiments	9
	4.1 Methodology	9
	4.2 Data sets	9
	4.3 Results	9
5	Summary	11
Bi	ibliography	III
Te	echnical documentation V	VII
Li	ist of abbreviations and symbols	IX
Li	ist of additional files	ΧI
Li	ist of figures X	III
Li	ist of tables	$\mathbf{x}\mathbf{v}$

Abstract

The text of the abstract should be copied into a respective field in the APD system. The Abstract with keywords should not exceed one page.

Keywords: 2-5 keywords, separated by commas

Introduction

- introduction into the problem domain
- settling of the problem in the domain
- objective of the thesis
- scope of the thesis
- short description of chapters
- clear description of contribution of the thesis's author

[Problem analysis]

- problem analysis, problem statement
- state of the art, literature research (all sources in the thesis have to be referenced, eg journal article [2] book [1], conference paper [3], internet source [4])
- $\bullet\,$ description of known solutions, algorithms
- location of the thesis in scientific domain
- The title of this chapter is similar to the title of the thesis.

[Subject of the thesis]

- solution to the problem proposed by the author of the thesis
- theoretical analysis of proposed solutions
- rationale of applied methods, algorithms, and tools

Experiments

This chapter presents the experiments. It is a crucial part of the thesis and has to dominate in the thesis. The experiments and their analysis should be done in the way commonly accepted in the scientific community (eg. benchmark datasets, cross validation of elaborated results, reproducibility and replicability of tests etc).

4.1 Methodology

- description of methodology of experiments
- description of experimental framework (description of user interface of research applications move to an appendix)

4.2 Data sets

• description of data sets

4.3 Results

• presentation of results, analysis and wide discussion of elaborated results, conclusions



Figure 4.1: A caption of a figure is **below** it.

Table 4.1: A caption of a table is **above** it.

method									
				alg. 3		alg. 4	$\gamma = 2$		
ζ	alg. 1	alg. 2	$\alpha = 1.5$	$\alpha = 2$	$\alpha = 3$	$\beta = 0.1$	$\beta = -0.1$		
0	8.3250	1.45305	7.5791	14.8517	20.0028	1.16396	1.1365		
5	0.6111	2.27126	6.9952	13.8560	18.6064	1.18659	1.1630		
10	11.6126	2.69218	6.2520	12.5202	16.8278	1.23180	1.2045		
15	0.5665	2.95046	5.7753	11.4588	15.4837	1.25131	1.2614		
20	15.8728	3.07225	5.3071	10.3935	13.8738	1.25307	1.2217		
25	0.9791	3.19034	5.4575	9.9533	13.0721	1.27104	1.2640		
30	2.0228	3.27474	5.7461	9.7164	12.2637	1.33404	1.3209		
35	13.4210	3.36086	6.6735	10.0442	12.0270	1.35385	1.3059		
40	13.2226	3.36420	7.7248	10.4495	12.0379	1.34919	1.2768		
45	12.8445	3.47436	8.5539	10.8552	12.2773	1.42303	1.4362		
50	12.9245	3.58228	9.2702	11.2183	12.3990	1.40922	1.3724		

Summary

- synthetic description of performed work
- conclusions
- future development, potential future research
- Has the objective been reached?

Bibliography

- [1] Name Surname and Name Surname. *Title of a book*. Hong Kong: Publisher, 2017. ISBN: 83-204-3229-9-434.
- [2] Name Surname and Name Surname. 'Title of an article in a journal'. In: Journal Title 157.8 (2016), pp. 1092–1113.
- [3] Name Surname, Name Surname and N. Surname. 'Title of a conference article'. In: *Conference title*. 2006, pp. 5346–5349.
- [4] Name Surname, Name Surname and N. Surname. *Title of a web page*. 2021. URL: http://somewhere/on/the/internet.html (visited on 30/09/2021).

Appendices

Technical documentation

List of abbreviations and symbols

DNA deoxyribonucleic acid

MVC model-view-controller

N cardinality of data set

 μ membership function of a fuzzy set

 \mathbb{E} set of edges of a graph

 \mathcal{L} Laplace transformation

List of additional files in electronic submission

Additional files uploaded to the system include:

- source code of the application,
- test data,
- etc.

List of Figures

4.1	A caption of	f a f	igure is	be.	ow it													1(O
-----	--------------	-------	----------	-----	-------	--	--	--	--	--	--	--	--	--	--	--	--	----	---

List of Tables

4.1	A caption of	a table is above it.		C
-----	--------------	-----------------------------	--	---