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Fakultät Informatik

My very fancy thesis title.

Bachelorarbeit im Studiengang Informatik

vorgelegt von

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Kurzdarstellung

Kurze Zusammenfassung der Arbeit, höchstens halbe Seite. Deutsche Fassung auch nötig, wenn die Arbeit auf Englisch angefertigt wird.

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Abstract

Only if thesis is written in English.

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Python 1

```

123 for i in range(10):
124     print(i)

```

Python Block 1

Rust 1

```

1 fn test(test: &mut u8) -> &mut u8{
2     test
3 }

```

Rust Block 1

Pseudocode 1

MASS(Q, T)

Input: *Abfrageteilsequenz Q , gesamte Zeitreihe T*

Output: *Distanzprofil D der Abfrageteilsequenz Q*

```

11  $m = \text{Length}(T) - \text{Length}(P)$ 
12  $\mu, \sigma = \text{ComputeMeanStd}(T, m)$ 
13  $\text{motif\_distances}, \text{motif\_indices}, \text{motif\_subspaces}, \text{motif\_mdls} = [ ]$ 
14 if not set otherwise
15     compute default values
16
17  $\text{candidate\_idx} = \text{get indices of row-wise minima in } P$ 
18  $\text{nn\_idx} = \text{length } d \text{ zero array}$ 
19 for  $k$  from 1 to  $d$ 
20      $\text{nn\_idx}[k] = I[k, \text{candidate\_idx}]$ 
21 while  $\text{Length}(\text{motif\_distances}) < \text{max\_motifs}$ 
22      $\text{mdls}, \text{subspaces} = \text{mdl}(T, m, \text{candidate\_idx}, \text{nn\_idx}, \text{include})$ 
23     if  $k$  is None
24          $k = \text{get index of minimum in mdls}$ 
25          $\text{subspace\_k} = \text{subspaces}[k]$ 
26          $\text{motif\_idx} = \text{candidate\_idx}[k]$ 
27          $\text{motiv\_value} = P[k, \text{motif\_idx}]$ 
28         if  $(\text{motiv\_value} > \text{cutoffs}[k] \text{ or } \text{motiv\_value is inf}$ 
29         or  $\text{motiv\_value} > \text{max\_distance})$ 
30             break
31      $\text{query\_matches} = \text{match}(\text{subspace\_k}, \text{motiv\_value})$ 

```

```

32   $\mathbf{T}[\text{subspace\_k}, \text{motif\_idx} : \text{motif\_idx} + m], \mathbf{T}[\text{subspace\_k}],$ 
33   $\mu[\text{subspace\_k}], \sigma[\text{subspace\_k}], \text{max\_matches}, \text{max\_distance},$ 
34   $\text{atol}, \text{motif\_idx}, \text{normalize}, p$ 
35  )
36  if Length(query_matches > min_neighbors)
37  append query_matches, subspace_k, mdl to output
38  for idx in query_matches[:, 1]
39  ApplyExclusionZone(P, idx)
40  find new candidate_idx and nn_idx
41  return motif_distances, motif_indices, motif_subspaces, motif_mdls
42
43
44
45
46
47
48
49
50
51
52  asdf

```

Pseudocodeblock 1

Chapter 1.

Data

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Chapter 2.

Method

In this chapter, we're actually using some code!

```
1 x = 1
2 if x == 1:
3     # indented four spaces
4     print("x is 1.")
```

Listing 2.1: This is an example of inline listing

You can also include listings from a file directly:

```
1 x = 1
2 if x == 1:
3     # indented four spaces
4     print("x is 1.")
```

Listing 2.2: This is an example of included listing

Chapter 3.

Experiments

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Chapter 4.

Outlook

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Chapter 5.

Summary

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Appendix A.

Supplemental Information

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Appendix A. Supplemental Information

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List of Tables

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2.2. This is an example of included listing	5

Glossary

library A suite of reusable code inside of a programming language for software development. i

shell Terminal of a Linux/Unix system for entering commands. i