



**FH Salzburg**  
MultiMediaTechnology

***Identifying the Ideal Length of Time to Record  
Smartphone Data, in Order to Obtain Distinct  
Clusters to Predict Eating Crises***

**Bachelor Thesis 1**

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Advisor: FH-Prof. DI Dr. Simon Ginzinger, MSc.

Salzburg, Austria, 10.05.2020

## **Affidavit**

I herewith declare on oath that I wrote the present thesis without the help of third persons and without using any other sources and means listed herein; I further declare that I observed the guidelines for scientific work in the quotation of all unprinted sources, printed literature and phrases and concepts taken either word for word or according to meaning from the Internet and that I referenced all sources accordingly.

This thesis has not been submitted as an exam paper of identical or similar form, either in Austria or abroad and corresponds to the paper graded by the assessors.

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*First Name* *Last Name*

## **KURZFASSUNG**

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## **ABSTRACT**

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## ABSTRACT

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## 1 INTRODUCTION

IN BODY THIS IS TEST INTRO

## 2 RELATED WORK

Related Work

## 3 THEORY

in theory

### 3.1 Data mining

in data mining

### 3.2 Cluster Analysis

in data mining

#### 3.2.1 Overview of clustering algorithms

Overview Clustering Algs

#### 3.2.2 Dimensionality reduction

Dimensionality Reduction

## 4 EXPERIMENT

in experiment

### 4.1 Preparation of the data set

in prep of data set

### 4.2 Clustering

in clustering

### 4.3 Clustering after dimensionality reduction

in clustering after dim red

### 4.4 Comparison and evaluation of clusters of different time lengths

in comparison of diff time lengths

## 5 DISCUSSION

in discussion.tex

## 6 CONCLUSION

in conclusion

# Appendices

**Anhänge löschen, die nicht verwendet werden.**

## A GIT-REPOSITORY

Das Repository dient zur Dokumentation und Nachvollziehbarkeit der Arbeitsschritte. Stellen Sie sicher, dass der/die BetreuerIn Zugriff auf das Repository hat. Stellen im Sinne des Datenschutzes sicher, dass das Repository nicht für andere zugänglich ist.

Verpflichtende Daten für Bachelorarbeit 1 und 2:

- LaTeX-Code der finalen Version der Arbeit
- alle Publikationen, die als pdf verfügbar sind.
- alle Webseiten als pdf

Verpflichtende Daten für Bachelorarbeit 2:

- Quellcode für praktischen Teil
- Vorlagen für Studienmaterial (Fragebögen, Einverständniserklärung, ...)
- eingescanntes, ausgefülltes Studienmaterial (Fragebögen, Einverständniserklärung, ...)
- Rohdaten und aufbereitete Daten der Evaluierungen (Log-Daten, Tabellen, Graphen, Scripts, ...)

Link zum Repository auf dem MMT-git-Server `gitlab.mediacube.at`:

`https://gitlab.mediacube.at/fhs123456/Abschlussarbeiten-Max-Muster`

## B VORLAGEN FÜR STUDIENMATERIAL

Vorlagen für Studienmaterial müssen in den Anhang.



## **C ARCHIVIERTE WEBSEITEN**

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[http://web.archive.org/web/20160526144551/http://scottbilas.com/files/2002/gdc\\_san\\_jose/game\\_objects\\_slides\\_with\\_notes.pdf](http://web.archive.org/web/20160526144551/http://scottbilas.com/files/2002/gdc_san_jose/game_objects_slides_with_notes.pdf), letzter Zugriff 1.1.2016