

# A DATABASE SYSTEM FOR MULTIMEDIA ANALYTICS AND ANALYSIS

**Inauguraldissertation**

zur

Erlangung der Würde eines Doktors der Philosophie

vorgelegt der

Philosophisch-Naturwissenschaftlichen Fakultät

der Universität Basel

von

Ralph Marc Philipp Gasser

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# **Zusammenfassung**



# Abstract



# Acknowledgements

Good luck.

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PART I

**Introduction**



# 1

## Introduction

Multimedia data is ubiquitous and in its various forms it touches almost every aspect of our social and economic everyday life. As the word suggest, multimedia encompasses many different content forms including but not limited to images, videos or audio data as well as any combination thereof.

### 1.1 Working with Multimedia Data

#### 1.1.1 Multimedia Analysis

#### 1.1.2 Multimedia Analytics

#### 1.1.3 Multimedia Retrieval

### 1.2 Focus and Significance of Research

The starting point for this Thesis is the current state-of-the-art in multimedia retrieval and analysis as outlined in the previous sections. Motivated by the “Ten Research Questions for Scalable Multimedia Analytics” [Jonson:2016], it challenges some of the basic assumptions currently employed and operated on and explores the ramifications thereof, with the higher level goal of furthering convergence between research done in *multimedia retrieval, analysis and analytics* on the one hand, and classical *databases* on the other hand.

**Interactivity** Current state-of-the-art, especially in multimedia retrieval, makes a clear distinction between an *offline* phase during which data is added to a collection, and an online



# **Appendix**



# Bibliography





# Curriculum Vitae

Name	Ralph Marc Philipp Gasser Brunnenweg 10, 4632 Trimbach
Date of Birth	28.03.1987
Birthplace	Riehen BS, Switzerland
Citizenship	Switzerland

## Education

since Jan. 2000	Ph. D. in Computer Science under the supervision of Prof. Dr. Heiko Schuldt, Databases and Information Systems research group, University of Basel, Switzerland
Sept. 1997 – Aug. 1999	M.Sc. in Computer Science, University of Basel, Switzerland
Sept. 1994 – Aug. 1997	B.Sc. in Computer Science, University of Basel, Switzerland

## Employment

since Jan. 2000	Research and teaching assistant, Databases and Information Systems research group, University of Basel, Switzerland
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## Publications

1937

– turing:1937.



# Declaration on Scientific Integrity

includes Declaration on Plagiarism and Fraud

**Author**

Ralph Marc Philipp Gasser

**Matriculation Number**

2007-050-131

**Title of Work**

A Database System for Multimedia Analytics and Analysis

**PhD Subject**

Computer Sciences

**Declaration**

I hereby declare that this doctoral dissertation "*A Database System for Multimedia Analytics and Analysis*" has been completed only with the assistance mentioned herein and that it has not been submitted for award to any other university nor to any other faculty at the University of Basel.

Basel, DD.MM.YYYY

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**Signature**