

# Summary and Conclusions

Tutorial Image Retrieval

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# Summary

1. Introduction
2. Content-based Image Retrieval
3. Text-based Image Retrieval
4. Combination of CBIR and TBIR
5. Relevance Feedback
6. Evaluation of IR

# Introduction

- Motivation and aims for IR/CBIR/TBIR
- Questions, Expectations

# Content-based Image Retrieval

- Two approaches
  - Continuous
  - Discrete
- Descriptors
  - Global, local, colour, texture, shapes
- Similarity measures
- Combinations
  - Correlations
  - Learning combinations
  - resources

# Text-based Image Retrieval

- Why Text?
- Basics in text retrieval
- Stemming
- Ontologies, Hierarchies, Coding standards
- Resources
- Multilingual retrieval
- Diversity

# Combinations of TBIR and CBIR

- Late vs. early fusion
- Direct fusion
  - Discrete approach
  - Continuous approach
- Fusion by refining
  - Multi-step
- User in the loop

# Relevance Feedback

- Interfaces
- Combination Schemes
- System Tuning
- Evaluation of user interaction

# Evaluation

- Aim of evaluations
- Evaluation campaigns
- Difficulties with evaluation
- Examples

**Thank you for your attention**

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