SIMILARITY SEARCH The Metric Space Approach

> Pavel Zezula, Giuseppe Amato, Vlastislav Dohnal, Michal Batko

Table of Content

Part I: Metric searching in a nutshell

- Foundations of metric space searching
- Survey of exiting approaches

Part II: Metric searching in large collections

- Centralized index structures
- Approximate similarity search
- Parallel and distributed indexes

Approximate Similarity Search

1. relative error approximation

- 2. good fraction approximation
- 3. small chance improvement approximation
- 4. proximity-based approximation
- 5. PAC nearest neighbor searching
- 6. performance trials