

Publication List of Kaspar Riesen since 2020

1. Publications in International Peer-Reviewed Scientific Journals

1. Mathias Fuchs, Kaspar Riesen:
Fast approximate maximum common subgraph computation.
Pattern Recognit. Lett. 190: 66-72 (2025)
2. Anthony Gillioz, Kaspar Riesen:
Normalized graph compression distance – A novel graph matching framework.
Pattern Recognit. Lett. 190: 97-104 (2025)
3. Anthony Gillioz, Kaspar Riesen:
Graph-based pattern recognition on spectral reduced graphs.
Pattern Recognit. 144: 109859 (2023)
4. Anthony Gillioz, Kaspar Riesen:
Building Multiple Classifier Systems Using Linear Combinations of Reduced Graphs.
SN Comput. Sci. 4(6): 743 (2023)
5. Mathias Fuchs, Kaspar Riesen:
A novel way to formalize stable graph cores by using matching-graphs.
Pattern Recognit. 131: 108846 (2022)
6. Michael Stauffer, Andreas Fischer, Kaspar Riesen:
Filters for graph-based keyword spotting in historical handwritten documents.
Pattern Recognit. Lett. 134: 125-134 (2020)
7. Kaspar Riesen, Miquel Ferrer, Horst Bunke:
Approximate Graph Edit Distance in Quadratic Time.
IEEE ACM Trans. Comput. Biol. Bioinform. 17(2): 483-494 (2020)

2. Books/Monographs

1. Kaspar Riesen: Java in 14 Wochen.
Springer 2020, ISBN 978-3-658-30312-9, pp. 1-385

3. Contributions to Books

1. Michael Stauffer, Paul Maergner, Andreas Fischer, Kaspar Riesen:
A Survey of State of the Art Methods Employed in the Offline Signature Verification Process.
New Trends in Business Information Systems and Technology; Digital Innovation and Digital Business Transformation Edited By: R. Dornberger (2021)
2. Paul Maergner, Kaspar Riesen, Rolf Ingold, Andreas Fischer:
Signature verification via graph-based methods.
Handbook of Pattern Recognition and Computer Vision (6th Edition) Edited By: C. H. Chen (2020)

4. Peer-Reviewed Conference Papers

1. Calvin Dobler, Kaspar Riesen:
Learning Graph Matching with Graph Neural Networks.
ANNPR 2024: 3-12
2. Hannes Thurnherr, Kaspar Riesen:
Neural Decompiling of Tracr Transformers.
ANNPR 2024: 25-36
3. Benjamin Fankhauser, Vidushi Bigler, Kaspar Riesen:
Leveraging LSTM Embeddings for River Water Temperature Modeling.
ANNPR 2024: 283-294

4. Francesco Leonardi, Kaspar Riesen:
Dissimilarity-Based Graph Embedding: An Efficient GAT-based Approach.
ICPR (10) 2024: 361-374
5. Corina Masanti, Hans Friedrich Witschel, Kaspar Riesen:
Automated Error Detection Through Specialized Task Implementation.
ICPRAI (2) 2024: 182-195
6. Aylin Tastan, Clara Escorihuela-Altaba, Jose F. Garcia-Tirado, Kaspar Riesen:
Clustering Time Series Data for Personalized Type 1 Diabetes Management.
ICPRAI (2) 2024: 196-211
7. Benjamin Fankhauser, Vidushi Bigler, Kaspar Riesen:
Impute Water Temperature in the Swiss River Network Using LSTMs.
ICPRAM 2024: 732-738
8. Calvin Dobler, Kaspar Riesen:
Learning Graph Similarity by Counting Holes in Simplicial Complexes.
S+SSPR 2024: 11-20
9. Benjamin Fankhauser, Vidushi Bigler, Kaspar Riesen:
Spatio-Temporal Graph Neural Networks for Water Temperature Modeling.
S+SSPR 2024: 31-40
10. Fabian Hüni, Jose F. Garcia-Tirado, Kaspar Riesen:
LSTM Networks and Graph Neural Networks for Predicting Events of Hypoglycemia.
S+SSPR 2024: 52-61
11. Michael Brunner, Kaspar Riesen:
Comparing Learning Methods to Enhance Decision-Making in Simulated Curling.
S+SSPR 2024: 156-165
12. Linlin Jia, Xiao Ning, Benoit Gauzère, Paul Honeine, Kaspar Riesen:
Bridging Distinct Spaces in Graph-based Machine Learning.
ACPR (2) 2023: 1-14
13. Benjamin Fankhauser, Vidushi Bigler, Kaspar Riesen:
Graph-Based Deep Learning on the Swiss River Network.
GbRPR 2023: 172-181
14. Mathias Fuchs, Kaspar Riesen:
Matching-Graphs for Building Classification Ensembles.
GbRPR 2023: 102-112
15. Anthony Gillioz, Kaspar Riesen:
Graph-Based vs. Vector-Based Classification: A Fair Comparison.
GbRPR 2023: 25-34
16. Anthony Gillioz, Kaspar Riesen:
Two-Step Graph Classification on the Basis of Hierarchical Graphs.
ICPRAM 2023: 296-303
17. Corina Masanti, Hans Friedrich Witschel, Kaspar Riesen:
Novel Benchmark Data Set for Automatic Error Detection and Correction.
NLDB 2023: 511-521
18. Anthony Gillioz, Kaspar Riesen:
Graph Reduction Neural Networks for Structural Pattern Recognition.
S+SSPR 2022: 64-73
19. Anthony Gillioz, Kaspar Riesen:
Speeding up Graph Matching by Means of Systematic Graph Reductions Using Centrality Measures.
ICPRS 2022: 1-7
20. Mathias Fuchs, Kaspar Riesen:
Graph Augmentation for Neural Networks Using Matching-Graphs.
ANNPR 2022: 3-15

21. Mathias Fuchs, Kaspar Riesen:
Augment Small Training Sets Using Matching-Graphs.
ICPRAI (2) 2022: 343-354
22. Anthony Gillioz, Kaspar Riesen:
Improving Graph Classification by Means of Linear Combinations of Reduced Graphs.
ICPRAM 2022: 17-23
23. Mathias Fuchs, Kaspar Riesen:
Iterative Creation of Matching-Graphs - Finding Relevant Substructures in Graph Sets.
CIARP 2021: 382-391
24. Hans Friedrich Witschel, Kaspar Riesen, Loris Grether:
Natural Language-based User Guidance for Knowledge Graph Exploration: A User Study.
KDIR 2021: 95-102
25. Mathias Fuchs, Kaspar Riesen:
Graph Embedding in Vector Spaces Using Matching-Graphs.
SISAP 2021: 352-363
26. Hans Friedrich Witschel, Kaspar Riesen, Loris Grether:
KvGR: A Graph-Based Interface for Explorative Sequential Question Answering on Heterogeneous Information Sources.
ECIR (1) 2020: 760-773
27. Mathias Fuchs, Kaspar Riesen:
Matching of Matching-Graphs - A Novel Approach for Graph Classification.
ICPR 2020: 6570-6576
28. Kaspar Riesen, Hans Friedrich Witschel, Loris Grether:
A Novel Data Set for Information Retrieval on the Basis of Subgraph Matching.
S+SSPR 2020: 205-215