

1. Record Nr.	UNISA996546851903316
Autore	Kerautret Bertrand
Titolo	Reproducible Research in Pattern Recognition [[electronic resource]] : Fourth International Workshop, RRPR 2022, Montreal, Canada, August 21, 2022, Revised Selected Papers // edited by Bertrand Kerautret, Miguel Colom, Adrien Krähenbühl, Daniel Lopresti, Pascal Monasse, Benjamin Perret
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	3-031-40773-3
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (127 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 14068
Altri autori (Persone)	ColomMiguel KrähenbühlAdrien LoprestiDaniel MonassePascal PerretBenjamin
Disciplina	005.3
Soggetti	Application software Computer engineering Computer networks Computers Artificial intelligence Computers, Special purpose Computer and Information Systems Applications Computer Engineering and Networks Computing Milieux Artificial Intelligence Computer Communication Networks Special Purpose and Application-Based Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Organization -- The Fuzzy Boundaries of Reproducibility (Lightweight Presentation Abstract) -- Contents -- Reproducible Research Framework -- Development Efforts for

Reproducible Research: Platform, Library and Editorial Investment -- 1
Introduction -- 2 Reproducible Research Platform Updates -- 3
Reproducible Research Through Libraries -- 3.1 Library Experiences
from Pattern Recognition, Image and Geometry Domains -- 3.2 Higr
Library Development Feedback -- 4 Advanced Editorial Efforts -- 4.1
Improvements in the IPOL Journal -- 4.2 OVD-SaaS, a Spin-Off of IPOL
for Industrial Applications -- 5 Conclusion -- References --
Reproducible Research Results -- Enhancing GNN Feature Modeling for
Document Information Extraction Using Transformers -- 1 Introduction
-- 2 Related Works -- 3 Proposed Model -- 3.1 Texts and Bounding
Boxes -- 3.2 Features Assignment -- 3.3 Graph Construction -- 3.4
GNN Model -- 3.5 Model Prediction -- 4 Experiments -- 4.1 Dataset --
4.2 Experimental Setup -- 4.3 Metrics -- 4.4 Results -- 4.5
Implementation Details -- 5 Conclusion -- References -- Short ICPR
Companion Papers -- A Novel Pattern-Based Edit Distance for
Automatic Log Parsing: Implementation and Reproducibility Notes -- 1
Introduction -- 2 Implementation Considerations -- 3 Installation Steps
-- 4 Pattern Clustering Usage -- 4.1 Pattern Collection -- 4.2 Returned
Value -- 4.3 Dropping Duplicated Pattern Automata -- 5 Experimental
Setup -- 5.1 Drain and LogMine Integration -- 5.2 Loghub Dataset --
5.3 Ground Truth -- 5.4 Experimental Parameters -- 5.5 Accuracy -- 6
Conclusion -- References -- Companion Paper: Deep Saliency Map
Generators for Multispectral Video Classification -- 1 Introduction -- 2
Deep Saliency Map Generators -- 2.1 Grad-CAM -- 2.2 RISE -- 2.3
SIDU -- 3 Networks -- 3.1 3D-ResNet -- 3.2 Persistent Appearance
Network.
4 Evaluation -- 4.1 Deletion Metric -- 4.2 Insertion Metric -- 5
Conclusion -- References -- On Challenging Aspects of Reproducibility
in Deep Anomaly Detection -- 1 Introduction -- 2 Deep Anomaly
Detection -- 3 Challenges for Reproducibility -- 3.1 Nondeterminism in
Network Optimization -- 3.2 Sensitivity to Hyperparameters -- 3.3
Complexity -- 3.4 Dataset Selection -- 3.5 Resource Limitations -- 3.6
Dependencies -- 4 Complexity-Evidence Tradeoff -- 5 Conclusion --
References -- On the Implementation of Baselines and Lightweight
Conditional Model Extrapolation (LIMES) Under Class-Prior Shift -- 1
Introduction -- 2 Dataset -- 3 Implementation -- 3.1 Preprocessing of
Raw Json Files with Twitter Data -- 3.2 Embeddings -- 3.3 Machine
Learning Models - Training and Evaluation -- 3.4 Running Experiments
Efficiently -- 4 Reproducibility -- 5 Credibility of Results -- 6
Conclusions -- References -- Special Reproducibility Track from DGMM
Event -- Combining Max-Tree and CNN for Segmentation of Cellular
FIB-SEM Images -- 1 Introduction -- 2 State of the Art -- 3 Methods --
3.1 Max-Tree -- 3.2 Segmentation -- 3.3 Evaluation Metrics -- 4
Experiments -- 4.1 Data -- 4.2 Results -- 4.3 Reproducibility -- 5
Conclusion -- A Appendix -- A.1 Results -- A.2 Example
Preprocessing Visualization -- References -- Automatic Forest Road
Extraction from LiDAR Data Using Convolutional Neural Networks*-
12pt -- 1 Introduction -- 2 Method -- 2.1 Problem Statement -- 2.2
Previous Approach to Forest Road Extraction -- 2.3 Light DDCM-Net
Architecture -- 3 Experimental Setup -- 3.1 Dataset -- 3.2 Network
Training -- 4 Results and Discussions -- 5 Conclusion -- References
-- Discussions Report Paper -- Promoting Reproducibility of Research
Results in International Events (Report from the 4th RRPR)*-12pt -- 1
Introduction -- 2 Addressing RR at International Conferences.
2.1 Recent Proposals -- 2.2 New Ideas on Promoting RR at International
Conferences -- 2.3 Impact of Efforts Encouraging RR in Conferences --
3 Focus on Motivating RR -- 3.1 Recent Initiatives -- 3.2 Issues for
Research Result Comparisons -- 3.3 Strengthening Reproducibility:

From Publications to Teaching -- 4 Conclusion -- References --
Author Index.

Sommario/riassunto

This book constitutes the thoroughly refereed post-workshop proceedings of the 4th International Workshop on Reproducible Research in Pattern Recognition, RRPR 2022, held in Montreal, Canada, in August 2022. The 5 revised full papers presented together with 4 short papers, were carefully reviewed and selected from 9 submissions. The papers were organized into three main categories.
