

# Bibliography

Prof. Dr. Jürgen Bernard

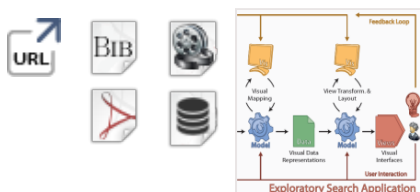
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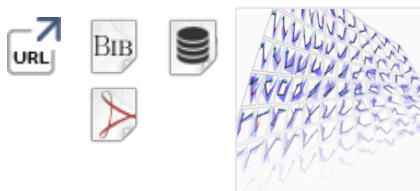
## Theses



- T002 **Exploratory search in time-oriented primary data**  
**[Bernard, J.](#)**  
Technische Universität Darmstadt, Dissertation, PhD Thesis (Dissertation) (2015).



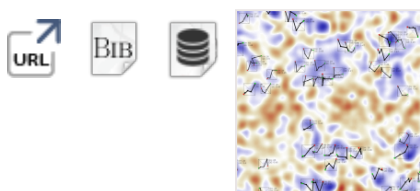
- T001 **Methoden zur Qualitätsbewertung von Self-organizing Maps zur Unterstützung des visuellen Analyseprozesses**  
**[Bernard, J.](#)**  
Technische Universität Darmstadt, Diploma Thesis (Diplomarbeit) (2009).



## Books



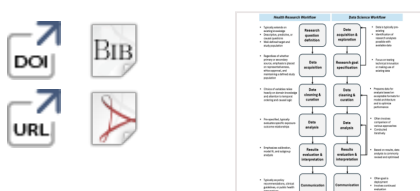
- B001 **Methoden zur Qualitätsbewertung von Self-organizing Maps (SOM): Unterstützung der Visuellen Clusteranalyse**  
**[Bernard, J.](#)**  
AV Akademikerverlag, 978-3-639-85612-5 pp. 100 p., (2015).



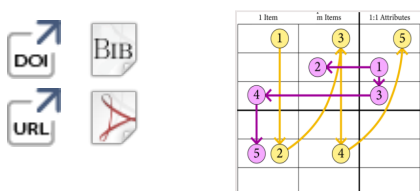
## Peer-reviewed Journal Articles



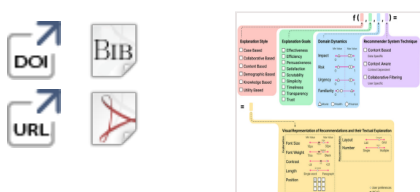
- J042 **Integrating artificial intelligence tools in health research**  
Postill, G., [Sedlakova, J.](#), Tancredi, S., Smit, F., Ekongefeyin, S., Baumer, A., Chiolero, A., **[Bernard, J.](#)**, Rosella, L., [von Wyl, V.](#)  
npj Digital Medicine (2026). doi: [10.1038/s41746-026-02739-7](https://doi.org/10.1038/s41746-026-02739-7)



- J041 **Systematic validation of LLM-generated structured data - A design space and remaining challenges**  
[Sachdeva, M.](#), [Narayanan, C.](#), [Wiedenkiller, M.](#), [Sedlakova, J.](#), **[Bernard, J.](#)**  
Computers & Graphics pp. 104545, (2026). doi: <https://doi.org/10.1016/j.cag.2026.104545>



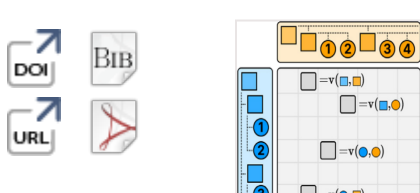
- J040 **f-RecX: A framework for designing effective textual explanations in recommender systems' user interfaces**  
[Al-Hazwani, I.](#), [Morgenshtern, G.](#), [El-Assady, M.](#), **[Bernard, J.](#)**  
International Journal of Human-Computer Studies pp. 103627, (2025). doi: <https://doi.org/10.1016/j.ijhcs.2025.103627>



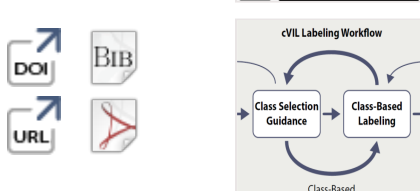
- J039 **VIVA: Virtual Healthcare Interactions Using Visual Analytics, With Controllability Through Configuration**  
**[Bernard, J.](#)**, [Solen, M.](#), [Lauscher, H.](#), [Stewart, K.](#), [Ho, K.](#), [Munzner, T.](#)  
IEEE Transactions on Visualization and Computer Graphics pp. 1-18, (2025). doi: [10.1109/TVCG.2025.3599458](https://doi.org/10.1109/TVCG.2025.3599458)



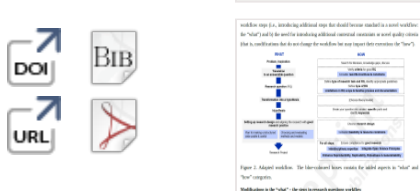
- J038 **HAXplorer: Interactive visual exploration of hierarchical item and attribute spaces**  
[Blum, M.](#), [Blum, J.](#), [Sachdeva, M.](#), **[Bernard, J.](#)**  
Computers & Graphics pp. 104233, (2025). doi: <https://doi.org/10.1016/j.cag.2025.104233>



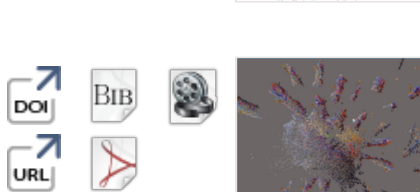
- J037 **Scalable Class-Centric Visual Interactive Labeling**  
[Matt, M.](#), [Sedlakova, J.](#), **[Bernard, J.](#)**, [Zeppelzauer, M.](#), [Waldner, M.](#)  
Computers & Graphics pp. 104240, (2025). doi: <https://doi.org/10.1016/j.cag.2025.104240>



- J036 **Refining Established Practices for Research Question Definition to Foster Interdisciplinary Research Skills in a Digital Age: Consensus Study With Nominal Group Technique**  
[Sedlakova, J.](#), [Stanikić, M.](#), [Gille, F.](#), **[Bernard, J.](#)**, [Horn, A.](#), [Wolf, M.](#), [Haag, C.](#), [Floris, J.](#), [Morgenshtern, G.](#), [Schneider, G.](#), [Zumbrunn Wojczyńska, A.](#), [Mouton Dorey, C.](#), [Ettlin, D.](#), [Gero, D.](#)  
JMIR Medical Education pp. e56369, (2025). doi: [10.2196/56369](https://doi.org/10.2196/56369)

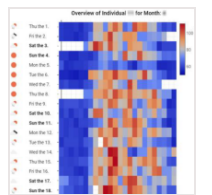


- J035 **DaedalusData: Exploration, Knowledge Externalization and Labeling of Particles in Medical Manufacturing – A Design Study**  
[Wyss, A.](#), [Morgenshtern, G.](#), [Hirsch-Husler, A.](#), **[Bernard, J.](#)**

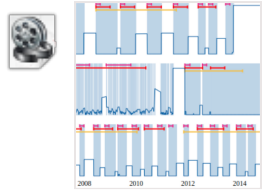




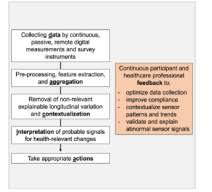
- J034 **MS Pattern Explorer: interactive visual exploration of temporal activity patterns for multiple sclerosis**  
[Morgenshtern, G.](#), [Rutishauser, Y.](#), [Haag, C.](#), [von Wyl, V.](#), [Bernard, J.](#)  
Journal of the American Medical Informatics Association pp. 2496-2506, (2024). doi: [10.1093/jamia/ocae230](https://doi.org/10.1093/jamia/ocae230)



- J033 **IVESA - Visual Analysis of Time-Stamped Event Sequences**  
[Bernard, J.](#), [Barth, C.](#), [Cuba, E.](#), [Meier, A.](#), [Peiris, Y.](#), [Shneiderman, B.](#)  
IEEE Transactions on Visualization and Computer Graphics (2024). doi: [10.1109/TVCG.2024.3382760](https://doi.org/10.1109/TVCG.2024.3382760)



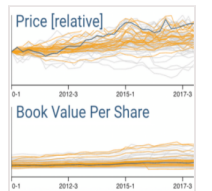
- J032 **From wearable sensor data to digital biomarker development: ten lessons learned and a framework proposal**  
[Danio, P.](#), [Nittas, V.](#), [Haag, C.](#), [Bernard, J.](#), [Gonzenbach, R.](#), [von Wyl, V.](#)  
npj Digital Medicine (2024). doi: [10.1038/S41746-024-01151-3](https://doi.org/10.1038/S41746-024-01151-3)



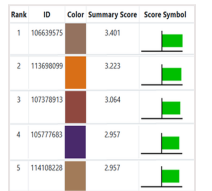
- J031 **ManuKnowVis: How to Support Different User Groups in Contextualizing and Leveraging Knowledge Repositories**  
[Eirich, J.](#), [Jäckle, D.](#), [Sedlmair, M.](#), [Wehner, C.](#), [Schmid, U.](#), [Bernard, J.](#), [Schreck, T.](#)  
IEEE Transactions on Visualization and Computer Graphics pp. 1-13, (2023). doi: [10.1109/TVCG.2023.3279857](https://doi.org/10.1109/TVCG.2023.3279857)



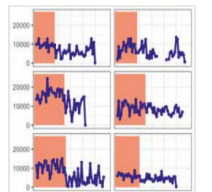
- J030 **LFPeers: Temporal Similarity Search and Result Exploration**  
[Sachdeva, M.](#), [Burmeister, J.](#), [Kohlhammer, J.](#), [Bernard, J.](#)  
Computers & Graphics (2023). doi: <https://doi.org/10.1016/j.cag.2023.06.009>



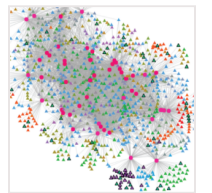
- J029 **How applicable are attribute-based approaches for human-centered ranking creation?**  
[Barth, C.](#), [Schmid, J.](#), [Al-Hazwani, I.](#), [Sachdeva, M.](#), [Cibulski, L.](#), [Bernard, J.](#)  
Computers & Graphics pp. 45-58, (2023). doi: <https://doi.org/10.1016/j.cag.2023.05.004>



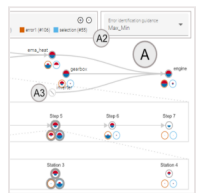
- J028 **Erfahrungen aus der BarKA-MS-Studie zum Einsatz von Fitnesstrackern in der stationären Neurorehabilitation**  
[von Wyl, V.](#), [Gonzenbach, R.](#), [Bernard, J.](#)  
Psychiatrie & Neurologie (2022).



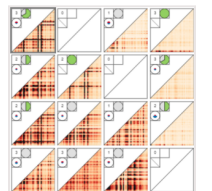
- J027 **Visualizing Graph Neural Networks with CorGIE: Corresponding a Graph to Its Embedding**  
[Liu, Z.](#), [Wang, Y.](#), [Bernard, J.](#), [Munzner, T.](#)  
IEEE Transactions on Visualization and Computer Graphics pp. 2500-2516, (2022). doi: [10.1109/TVCG.2022.3148197](https://doi.org/10.1109/TVCG.2022.3148197)



- J026 **ManEx: The Visual Analysis of Measurements for the Assessment of Errors in Electrical Engines**  
[Eirich, J.](#), [Koutroulis, G.](#), [Mutlu, B.](#), [Jäckle, D.](#), [Kern, R.](#), [Schreck, T.](#), [Bernard, J.](#)  
IEEE Computer Graphics and Applications pp. 68-80, (2022). doi: [10.1109/MCG.2022.3155306](https://doi.org/10.1109/MCG.2022.3155306)



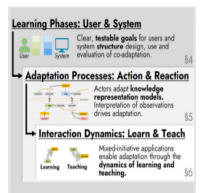
- J025 **IRVINE: A Design Study on Analyzing Correlation Patterns of Electrical Engines**  
[Eirich, J.](#), [Bonart, J.](#), [Jäckle, D.](#), [Sedlmair, M.](#), [Schmid, U.](#), [Fischbach, K.](#), [Schreck, T.](#), [Bernard, J.](#)  
IEEE Transactions on Visualization and Computer Graphics (TVCG) pp. 11-21, (2022). doi: [10.1109/TVCG.2021.3114797](https://doi.org/10.1109/TVCG.2021.3114797)



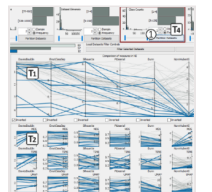
- J024 **QuestionComb: A Gamification Approach for the Visual Explanation of Linguistic Phenomena through Interactive Labeling**  
[Sevastjanova, R.](#), [Jentner, W.](#), [Sperrle, F.](#), [Kehlbeck, R.](#), [Bernard, J.](#), [El-Assady, M.](#)  
ACM Transactions on Interactive Intelligent Systems (TiiS) pp. 1-38, (2021). doi: [10.1145/3429448](https://doi.org/10.1145/3429448)



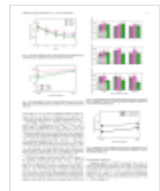
- J023 **Co-adaptive visual data analysis and guidance processes**  
[Sperrle, F.](#), [Jeitler, A.](#), [Bernard, J.](#), [Keim, D.](#), [El-Assady, M.](#)  
Computers & Graphics (2021). doi: <https://doi.org/10.1016/j.cag.2021.06.016>



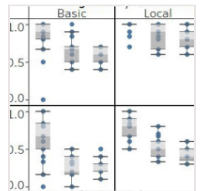
- J022 **ProSeCo: Visual analysis of class separation measures and dataset characteristics**  
[Bernard, J.](#), [Hutter, M.](#), [Zeppelzauer, M.](#), [Sedlmair, M.](#), [Munzner, T.](#)  
Computers & Graphics pp. 48-60, (2021). doi: <https://doi.org/10.1016/j.cag.2021.03.004>



- J021 **A Taxonomy of Property Measures to Unify Active Learning and Human-centered Approaches to Data Labeling**  
[Bernard, J.](#), [Hutter, M.](#), [Sedlmair, M.](#), [Zeppelzauer, M.](#), [Munzner, T.](#)  
ACM Transactions on Interactive Intelligent Systems (TiiS) (2021). doi: [10.1145/3439333](https://doi.org/10.1145/3439333)

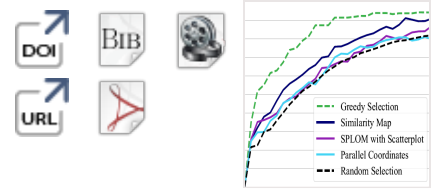


- J020 **The Effect of Alignment on Peoples Ability to Judge Event Sequence Similarity**  
[Ruddle, R.](#), [Bernard, J.](#), [Lücke-Tieke, H.](#), [May, T.](#), [Kohlhammer, J.](#)  
IEEE Transactions on Visualization and Computer Graphics pp. 1-1, (2021). doi: [10.1109/TVCG.2021.3050497](https://doi.org/10.1109/TVCG.2021.3050497)





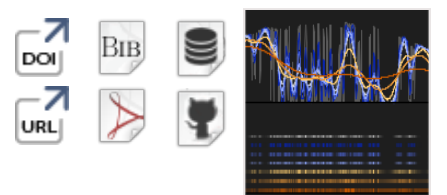
- J019 **Interactive Visual Labelling versus Active Learning: An Experimental Comparison**  
Chegini, M., Bernard, J., Cui, J., Chegini, F., Sourin, A., Andrews, K., Schreck, T.  
Frontiers of Information Technology & Electronic Engineering (FITEE) pp. 524-535, (2020). doi: [10.1631/FITEE.1900549](https://doi.org/10.1631/FITEE.1900549)



- J018 **ConfusionFlow: A model-agnostic visualization for temporal analysis of classifier confusion**  
Hinterreiter, A., Ruch, P., Stitz, H., Ennemoser, M., Bernard, J., Strobelt, H., Streit, M.  
IEEE Transactions on Visualization and Computer Graphics (2020).



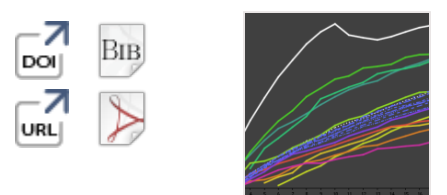
- J017 **Visual-Interactive Preprocessing of Multivariate Time Series Data**  
Bernard, J., Hutter, M., Reinemuth, H., Pfeifer, H., Bors, C., Kohlhammer, J.  
Computer Graphics Forum (CGF) pp. 401-412, (2019). doi: [10.1111/cgf.13698](https://doi.org/10.1111/cgf.13698)



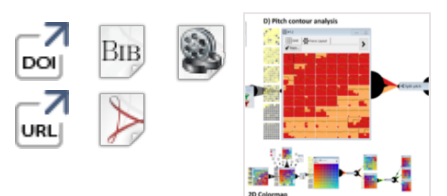
- J016 **Interactive Labelling of a Multivariate Dataset for Supervised Machine Learning Using Linked Visualisations, Clustering, and Active Learning**  
Chegini, M., Bernard, J., Berger, P., Sourin, A., Andrews, K., Schreck, T.  
Visual Informatics pp. 9-17, (2019). doi: [10.1016/j.visinf.2019.03.002](https://doi.org/10.1016/j.visinf.2019.03.002)



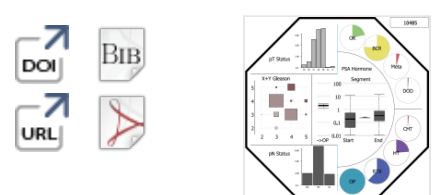
- J015 **Towards User-Centered Active Learning Algorithms**  
Bernard, J., Zeppelzauer, M., Lehmann, M., Müller, M., Sedlmair, M.  
Computer Graphics Forum (CGF) pp. 121-132, (2018). doi: [10.1111/cgf.13406](https://doi.org/10.1111/cgf.13406)



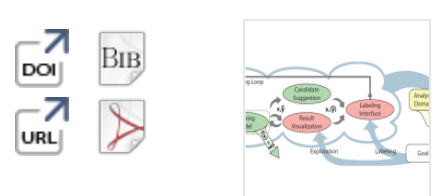
- J014 **SOMFlow: Guided Exploratory Cluster Analysis with Self-Organizing Maps and Analytic Provenance**  
Sacha, D., Kraus, M., Bernard, J., Behrisch, M., Schreck, T., Asano, Y., Keim, D.  
IEEE Transactions on Visualization and Computer Graphics (TVCG) pp. 120-130, (2018). doi: [10.1109/TVCG.2017.2744805](https://doi.org/10.1109/TVCG.2017.2744805)



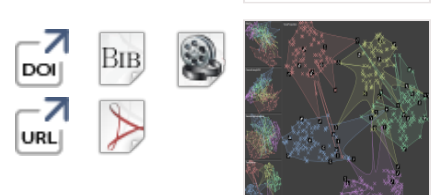
- J013 **Using dashboard networks to visualize multiple patient histories: a design study on post-operative prostate cancer**  
Bernard, J., Sessler, D., Kohlhammer, J., Ruddle, R.  
IEEE Transactions on Visualization and Computer Graphics (TVCG) pp. 1615-1628, (2018). doi: [10.1109/TVCG.2018.2803829](https://doi.org/10.1109/TVCG.2018.2803829)



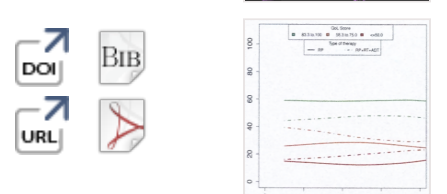
- J012 **VIAL: a unified process for visual interactive labeling**  
Bernard, J., Zeppelzauer, M., Sedlmair, M., Aigner, W.  
The Visual Computer (TVCJ) pp. 1189-1207, (2018). doi: [10.1007/s00371-018-1500-3](https://doi.org/10.1007/s00371-018-1500-3)



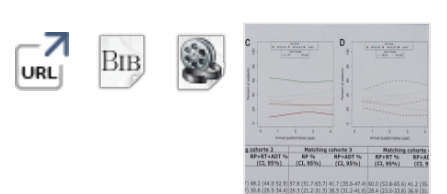
- J011 **Comparing Visual-Interactive Labeling with Active Learning: An Experimental Study**  
Bernard, J., Hutter, M., Zeppelzauer, M., Fellner, D., Sedlmair, M.  
IEEE Transactions on Visualization and Computer Graphics (TCVG) pp. 298-308, (2018). doi: [10.1109/TVCG.2017.2744818](https://doi.org/10.1109/TVCG.2017.2744818)



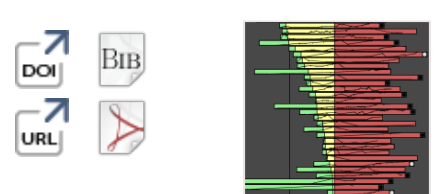
- J010 **Functional Outcomes and Quality of Life After Radical Prostatectomy Only Versus a Combination of Prostatectomy with Radiation and Hormonal Therapy**  
Adam, M., Tennstedt, P., Lanwehr, D., Tilki, D., Steuber, T., Beyer, B., Pehrke, D., Stattin, P., Bernard, J., Klaus, B., Loeb, S., Schlomm, T.  
European Urology pp. 330-336, (2017). doi: <https://doi.org/10.1016/j.eururo.2016.11.015>



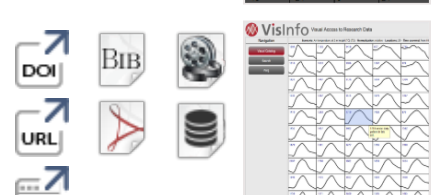
- J009 **Toxicity in a Multimodality Approach of Radical Prostatectomy with Radiation and Hormonal Therapy**  
Loeb, S., Adam, M., Tennstedt, P., Huber, W., Bernard, J., Tilki, D., Graefen, M., Huland, H., Schlomm, T.  
Journal of Clinical Oncology (JCO) pp. 107, (2016).



- J008 **A Visual-Interactive System for Prostate Cancer Cohort Analysis**  
Bernard, J., Sessler, D., May, T., Schlomm, T., Pehrke, D., Kohlhammer, J.  
Computer Graphics and Applications (CG&A), IEEE pp. 44-55, (2015). doi: [10.1109/MCG.2015.49](https://doi.org/10.1109/MCG.2015.49)



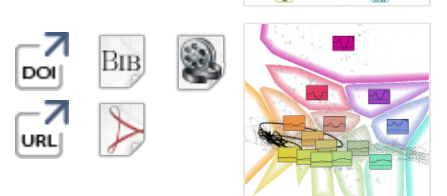
- J007 **VisInfo: a digital library system for time series research data based on exploratory search—a user-centered design approach**  
Bernard, J., Daberkow, D., Fellner, D., Fischer, K., Koepler, O., Kohlhammer, J., Runnwerth, M., Ruppert, T., Schreck, T., Sens, I.  
International Journal on Digital Libraries (IJoDL), Springer pp. 37-59, (2015). doi: [10.1007/s00799-014-0134-y](https://doi.org/10.1007/s00799-014-0134-y)



- J006 **Visual-interactive Exploration of Interesting Multivariate Relations in Mixed Research Data Sets**  
Bernard, J., Steiger, M., Widmer, S., Lücke-Tieke, H., May, T., Kohlhammer, J.  
Computer Graphics Forum (CGF) pp. 291-300, (2014). doi: [10.1111/cgf.12385](https://doi.org/10.1111/cgf.12385)

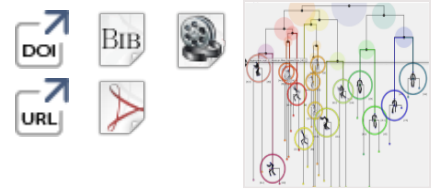


- J005 **Visual Analysis of Time-Series Similarities for Anomaly Detection in Sensor Networks**  
Steiger, M., Bernard, J., Mittelstädt, S., Lücke-Tieke, H., Keim, D., May, T., Kohlhammer, J.  
Computer Graphics Forum (CGF) pp. 401-410, (2014). doi: [10.1111/cgf.12396](https://doi.org/10.1111/cgf.12396)

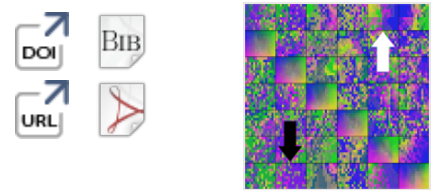




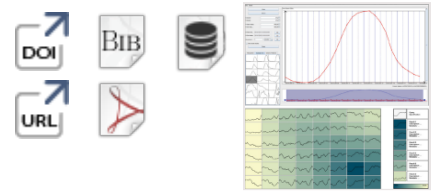
- J004 **MotionExplorer: Exploratory Search in Human Motion Capture Data Based on Hierarchical Aggregation**  
**Bernard, J., Wilhelm, N., Krüger, B., May, T., Schreck, T., Kohlhammer, J.**  
IEEE Transactions on Visualization and Computer Graphics (TVCG) pp. 2257-2266, (2013). doi: [10.1109/TVCG.2013.178](https://doi.org/10.1109/TVCG.2013.178)



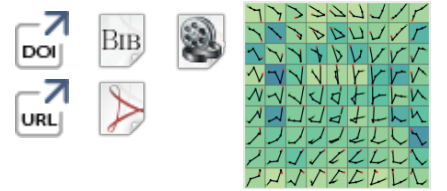
- J003 **Assisted Descriptor Selection Based on Visual Comparative Data Analysis**  
**Bremm, S., von Landesberger, T., Bernard, J., Schreck, T.**  
Computer Graphics Forum (CGF) pp. 891-900, (2011). doi: [10.1111/j.1467-8659.2011.01938.x](https://doi.org/10.1111/j.1467-8659.2011.01938.x)



- J002 **A visual digital library approach for time-oriented scientific primary data**  
**Bernard, J., Brase, J., Fellner, D., Koepler, O., Kohlhammer, J., Ruppert, T., Schreck, T., Sens, I.**  
International Journal of Digital Libraries (IJoDL), ECDL 2010 Special Issue, Springer pp. 111-123, (2011). doi: [10.1007/s00799-011-0072-x](https://doi.org/10.1007/s00799-011-0072-x)



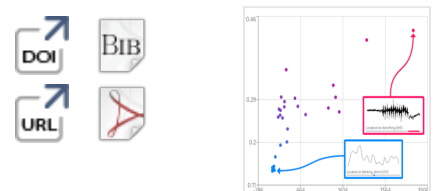
- J001 **Visual Cluster Analysis of Trajectory Data with Interactive Kohonen Maps**  
**Schreck, T., Bernard, J., von Landesberger, T., Kohlhammer, J.**  
Information Visualization, Palgrave Macmillan pp. 14-29, (2009). doi: [10.1057/ivs.2008.29](https://doi.org/10.1057/ivs.2008.29)



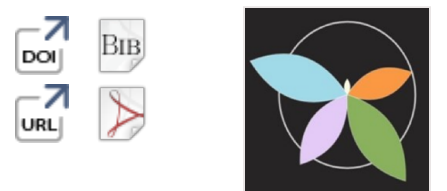
## Peer-reviewed Full Papers



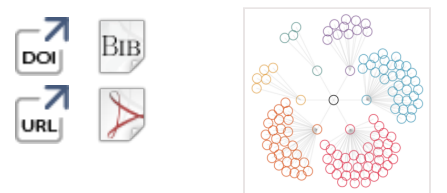
- P032 **AnoScout - Visual Exploration of Anomalies and Anomaly Detection Algorithm Ensembles in Time Series Data**  
**Rakuschek, J., Leitner, M., Bernard, J., Wriessnegger, S., Schreck, T.**  
Visual Information Communication and Interaction, ACM (2025). doi: [10.1145/3769534.3769577](https://doi.org/10.1145/3769534.3769577)



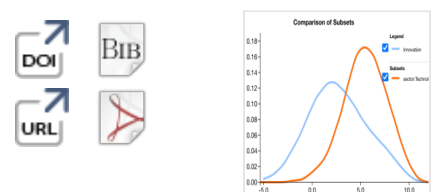
- P031 **HUMMUS: Blending Data Humanism with Sequential Music Recommender Systems to Foster Explainability and Scrutability**  
**Al-Hazwani, I., Mylaeus, M., Mormoce, D., Bernard, J.**  
Visual Information Communication and Interaction, ACM (2025). doi: [10.1145/3769534.3769578](https://doi.org/10.1145/3769534.3769578)



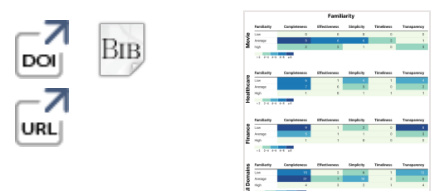
- P030 **Blooming Beats: An Interactive Explainable Recommender System for Exploring Personal Music Narratives through Data Humanism Principles**  
**Al-Hazwani, I., Ahmed, N., Fedosov, A., Aschwanden, O., Huber, L., Lutziger, D., Kirchdorfer, C., Bernard, J.**  
Biannual Conference of the Italian SIGCHI Chapter, ACM (2025). doi: [10.1145/3750069.3750396](https://doi.org/10.1145/3750069.3750396)



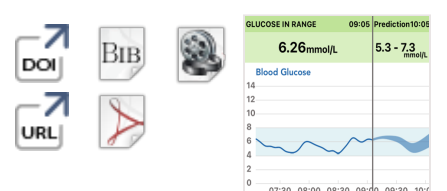
- P029 **Val-LLM: A Visual Analytics Approach for the Critical Validation of LLM-Generated Tabular Data**  
**Sachdeva, M., Narayanan, C., Wiedenkiller, M., Sedlakova, J., Bernard, J.**  
Vision, Modeling, and Visualization, (VMV), Eurographics Association (2025). doi: [10.2312/vmv.20251235](https://doi.org/10.2312/vmv.20251235)



- P028 **Towards Personal Explanations for Recommender Systems: A Study on the Impact of Familiarity and Urgency**  
**Al-Hazwani, I., Ahmed, N., El-Assady, M., Bernard, J.**  
Adjunct Proceedings of the 2024 Nordic Conference on Human-Computer Interaction (NordiCHI), Association for Computing Machinery (2024). doi: [10.1145/3677045.3685430](https://doi.org/10.1145/3677045.3685430)



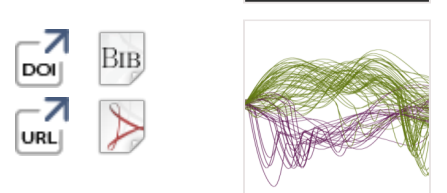
- P027 **"It s like a glimpse into the future": Exploring the Role of Blood Glucose Prediction Technologies for Type 1 Diabetes Self-Management**  
**Barth, C., Bernard, J., Huang, E.**  
CHI Conference on Human Factors in Computing Systems (CHI), Association for Computing Machinery (2024). doi: [10.1145/3613904.3642234](https://doi.org/10.1145/3613904.3642234)



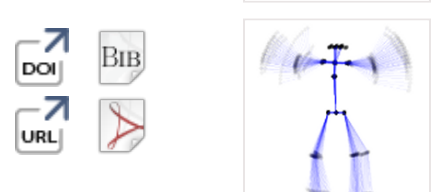
- P026 **LayoutExOmizer: Interactive Exploration and Optimization of 2D Data Layouts**  
**Schader, P., Beckmann, R., Graner, L., Bernard, J.**  
Vision, Modeling, and Visualization, (VMV), Eurographics Association pp. 99-107, (2021). doi: [10.2312/vmv.20211376](https://doi.org/10.2312/vmv.20211376)



- P025 **Visualizing Time Series Consistency for Feature Selection**  
**Cibulski, L., May, T., Preim, B., Bernard, J., Kohlhammer, J.**  
Conference in Central Europe on Computer Graphics, Visualization and Computer Vision, Vaclav Skala-UNION Agency (2019). doi: <http://hdl.handle.net/11025/35593>



- P024 **Approaches and Challenges in the Visual-Interactive Comparison of Human Motion Data**  
**Bernard, J., Vögele, A., Klein, R., Fellner, D.**  
Conference on Information Visualization Theory and Applications (IVAPP, VISIGRAPP) pp. 217-224, (2017). doi: [10.5220/0006127502170224](https://doi.org/10.5220/0006127502170224)



- P023 **Visual-Interactive Similarity Search for Complex Objects by Example of Soccer Player Analysis**  
**Bernard, J., Ritter, C., Sessler, D., Zeppelzauer, M., Kohlhammer, J., Fellner, D.**  
Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (IVAPP, VISIGRAPP) (3) pp. 75-87, (2017). doi: [10.5220/0006116400750087](https://doi.org/10.5220/0006116400750087)

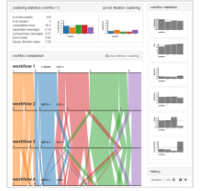


- P022 **Visual-Interactive Semi-Supervised Labeling of Human Motion Capture Data**  
**Bernard, J., Dobermann, E., Vögele, A., Krüger, B., Kohlhammer, J.**  
Visualization and Data Analysis (VDA 2017) (2017). doi: <https://doi.org/10.2352/ISSN.2470-1173.2017.1.VDA-387>

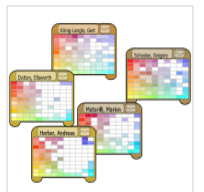




- P021 **Visual Interactive Creation and Validation of Text Clustering Workflows to Explore Document Collections**  
[Ruppert, T.](#), [Staab, M.](#), [Bannach, A.](#), [Lücke-Tieke, H.](#), **[Bernard, J.](#)**, [Kuijper, A.](#), [Kohlhammer, J.](#)  
Electronic Imaging pp. 46-57, (2017). doi: [doi:10.2352/ISSN.2470-1173.2017.1.VDA-388](#)



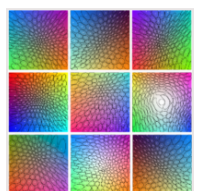
- P020 **Exploratory search in time-oriented primary data**  
**[Bernard, J.](#)**  
Ausgezeichnete Informatikdissertationen 2015 (D-16), Gesellschaft für Informatik (GI) pp. 11-20, (2016).



- P019 **Supporting Collaborative Political Decision Making: An Interactive Policy Process Visualization System**  
[Ruppert, T.](#), [Bannach, A.](#), **[Bernard, J.](#)**, [Lücke-Tieke, H.](#), [Ulmer, A.](#), [Kohlhammer, J.](#)  
Symposium on Visual Information Communication and Interaction, ACM pp. 104-111, (2016). doi: [10.1145/2968220.2968223](#)



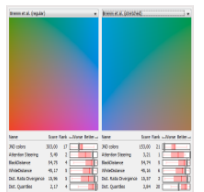
- P018 **A survey and task-based quality assessment of static 2D colormaps**  
**[Bernard, J.](#)**, [Steiger, M.](#), [Mittelstädt, S.](#), [Thum, S.](#), [Keim, D.](#), [Kohlhammer, J.](#)  
Electronic Imaging, SPIE Conference on Visualization and Data Analysis pp. 93970M-93970M-16, (2015). doi: [10.1117/12.2079841](#)



- P017 **FuryExplorer: Visual-Interactive Exploration of Horse Motion Capture Data**  
[Wilhelm, N.](#), [Vögele, A.](#), [Zsoldos, R.](#), [Licka, T.](#), [Krüger, B.](#), **[Bernard, J.](#)**  
Electronic Imaging, SPIE Conference on Visualization and Data Analysis (2015). doi: [doi:10.1117/12.2080001](#)



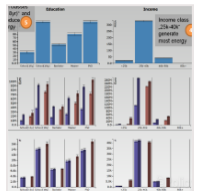
- P016 **Explorative Analysis of 2D Color Maps**  
[Steiger, M.](#), **[Bernard, J.](#)**, [Mittelstädt, S.](#), [Hutter, M.](#), [Keim, D.](#), [Thum, S.](#), [Kohlhammer, J.](#)  
Proceedings of WSCG (23), Eurographics Association, Vaclav Skala - Union Agency pp. 151-160, (2015).



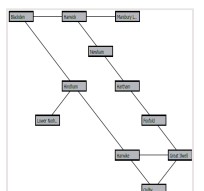
- P015 **Visual Access to an Agent-based Simulation Model to Support Political Decision Making**  
[Ruppert, T.](#), **[Bernard, J.](#)**, [Ulmer, A.](#), [Lücke-Tieke, H.](#), [Kohlhammer, J.](#)  
Conference on Knowledge Technologies and Data-driven Business, ACM pp. 1-16, (2014). doi: [10.1145/2637748.2638410](#)



- P014 **Combining Computational Models and Interactive Visualization to Support Rational Decision Making**  
[Ruppert, T.](#), **[Bernard, J.](#)**, [May, T.](#), [Kohlhammer, J.](#)  
Advances in Visual Computing (8887), Springer International Publishing pp. 345-356, (2014). doi: [10.1007/978-3-319-14249-4\\_33](#)



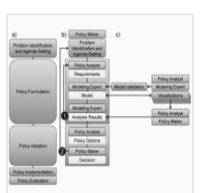
- P013 **A Survey of Direction-preserving Layout Strategies**  
[Steiger, M.](#), **[Bernard, J.](#)**, [May, T.](#), [Kohlhammer, J.](#)  
Spring Conference on Computer Graphics, ACM pp. 21-28, (2014). doi: [10.1145/2643188.2643189](#)



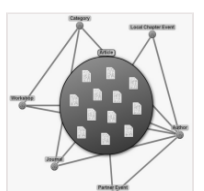
- P012 **User-Based Visual-Interactive Similarity Definition for Mixed Data Objects-Concept and First Implementation**  
**[Bernard, J.](#)**, [Sessler, D.](#), [Ruppert, T.](#), [Davey, J.](#), [Kuijper, A.](#), [Kohlhammer, J.](#)  
Proceedings of WSCG (22), Eurographics Association, Vaclav Skala - Union Agency pp. 329-338, (2014).



- P011 **Bridging Knowledge Gaps in Policy Analysis with Information Visualization**  
[Ruppert, T.](#), **[Bernard, J.](#)**, [Kohlhammer, J.](#)  
Conference on Electronic Government (EGOV/ePart Ongoing Research) (221), GI pp. 92-103, (2013).



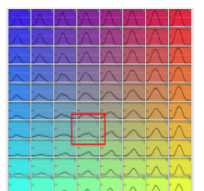
- P010 **Adaptive Semantic Visualization for Bibliographic Entries**  
[Nazemi, K.](#), [Retz, R.](#), **[Bernard, J.](#)**, [Kohlhammer, J.](#), [Fellner, D.](#)  
Advances in Visual Computing (8034), Springer Berlin Heidelberg pp. 13-24, (2013). doi: [10.1007/978-3-642-41939-3\\_2](#)



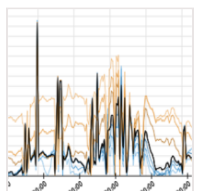
- P009 **Visual Access to Optimization Problems in Strategic Environmental Assessment**  
[Ruppert, T.](#), **[Bernard, J.](#)**, [Ulmer, A.](#), [Kuijper, A.](#), [Kohlhammer, J.](#)  
Advances in Visual Computing (8034), Springer Berlin Heidelberg pp. 361-372, (2013). doi: [10.1007/978-3-642-41939-3\\_35](#)

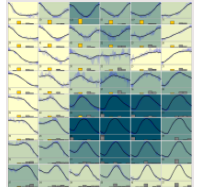
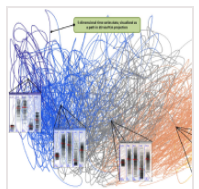
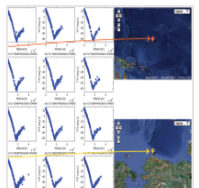
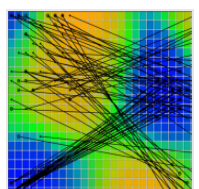
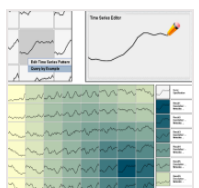
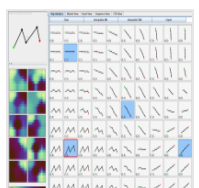


- P008 **Content-based layouts for exploratory metadata search in scientific research data**  
**[Bernard, J.](#)**, [Ruppert, T.](#), [Scherer, M.](#), [Kohlhammer, J.](#), [Schreck, T.](#)  
ACM/IEEE-CS Joint Conference on Digital Libraries, ACM pp. 139-148, (2012). doi: [10.1145/2232817.2232844](#)

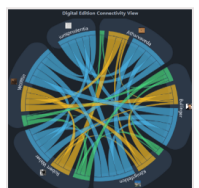
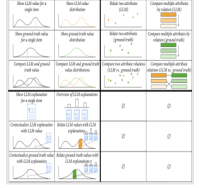
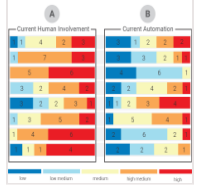


- P007 **Visual-Interactive Preprocessing of Time Series Data**  
**[Bernard, J.](#)**, [Ruppert, T.](#), [Goroll, O.](#), [May, T.](#), [Kohlhammer, J.](#)  
SIGRAD, Swedish Chapter of Eurographics (81), Linköping University Electronic Press pp. 39-48, (2012).



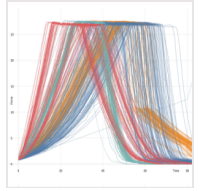
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|     | P006 | <b>Guided Discovery of Interesting Relationships Between Time Series Clusters and Metadata Properties</b><br><u>Bernard, J.</u> , <u>Ruppert, T.</u> , <u>Scherer, M.</u> , <u>Schreck, T.</u> , <u>Kohlhammer, J.</u><br>International Conference on Knowledge Management and Knowledge Technologies, ACM pp. 1-22, (2012). doi: <a href="https://doi.org/10.1145/2362456.2362485">10.1145/2362456.2362485</a>                |                         |
|   | P005 | <b>TimeSeriesPaths: Projection-Based Explorative Analysis of Multivariate Time Series Data</b><br><u>Bernard, J.</u> , <u>Wilhelm, N.</u> , <u>Scherer, M.</u> , <u>May, T.</u> , <u>Schreck, T.</u><br>Journal of WSCG pp. 97-106, (2012).                                                                                                                                                                                    |                                                                                             |
|   | P004 | <b>Retrieval and Exploratory Search in Multivariate Research Data Repositories Using Regressional Features</b><br><u>Scherer, M.</u> , <u>Bernard, J.</u> , <u>Schreck, T.</u><br>ACM/IEEE Joint Conference on Digital Libraries, ACM pp. 363-372, (2011). doi: <a href="https://doi.org/10.1145/1998076.1998144">10.1145/1998076.1998144</a>                                                                                  |                                                                                             |
|   | P003 | <b>Multiscale visual quality assessment for cluster analysis with Self-Organizing Maps</b><br><u>Bernard, J.</u> , <u>von Landesberger, T.</u> , <u>Bremm, S.</u> , <u>Schreck, T.</u><br>Electronic Imaging, SPIE Conference on Visualization and Data Analysis pp. 1-78680, (2011). doi: <a href="https://doi.org/10.1117/12.872545">10.1117/12.872545</a>                                                                   |          |
|   | P002 | <b>A Visual Digital Library Approach for Time-Oriented Research Data</b><br><u>Bernard, J.</u> , <u>Brase, J.</u> , <u>Fellner, D.</u> , <u>Koepler, O.</u> , <u>Kohlhammer, J.</u> , <u>Ruppert, T.</u> , <u>Schreck, T.</u> , <u>Sens, I.</u><br>European Conference on Digital Libraries (6273), Springer pp. 352-363, (2010). doi: <a href="https://doi.org/10.1007/978-3-642-15464-5_35">10.1007/978-3-642-15464-5_35</a> |          |
|  | P001 | <b>Visual Cluster Analysis of Trajectory Data with Interactive Kohonen Maps</b><br><u>Schreck, T.</u> , <u>Bernard, J.</u> , <u>Tekusova, T.</u> , <u>Kohlhammer, J.</u><br>IEEE Symposium on Visual Analytics Science and Technology, IEEE Computer Society pp. 3-10, (2008). doi: <a href="https://doi.org/10.1109/VAST.2008.4677350">10.1109/VAST.2008.4677350</a>                                                          |       |

Peer-reviewed Workshop Publications

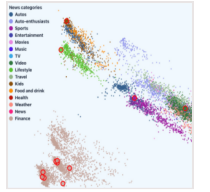
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|  | W042 | <b>Exploring Multi-Faceted Connections Between Heterogeneous Digital Scholarly Editions: A Data-First Design Study</b><br><u>Sachdeva, M.</u> , <u>Blum, M.</u> , <u>Stricker, Y.</u> , <u>Mumenthaler, R.</u> , <u>Bernard, J.</u><br>IEEE VIS Workshop on Visualization for the Digital Humanities (VIS4DH), IEEE (2025).                                                                                                                                                         |                                                                                                                                                                                |
|  | W041 | <b>HUMMUS: A Human-Centered Approach to Sequential Recommendation Explainability through Data Humanism</b><br><u>Al-Hazwani, I.</u> , <u>Mylaeus, M.</u> , <u>Mormoceea, D.</u> , <u>Bernard, J.</u> , <u>Porcaro, L.</u><br>ACM RecSys Workshop on Music Recommender Systems (MuRS), ACM (2025).                                                                                                                                                                                   |                                                                                           |
|  | W040 | <b>Grand Challenge: Mediating Between Confirmatory and Exploratory Research Cultures in Health Sciences and Visual Analytics</b><br><u>von Wyl, V.</u> , <u>Bernard, J.</u><br>IEEE VIS Workshop on Visual Analytics in Healthcare (Grand Challenge Position) (2025).                                                                                                                                                                                                               |                                                                                           |
|  | W039 | <b>The Human-Data-Model Interaction Canvas for Visual Analytics</b><br><u>Bernard, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2025). doi: <a href="https://doi.org/10.2312/eurova.20251096">10.2312/eurova.20251096</a>                                                                                                                                                                                                                 |      |
|  | W038 | <b>A Design Space for the Critical Validation of LLM-Generated Tabular Data</b><br><u>Sachdeva, M.</u> , <u>Narayanan, C.</u> , <u>Wiedenkiller, M.</u> , <u>Sedlakova, J.</u> , <u>Bernard, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2025). doi: <a href="https://doi.org/10.2312/eurova.20251101">10.2312/eurova.20251101</a>                                                                                                       |      |
|  | W037 | <b>SwissText 2024 Shared Task: Automatic Classification of the United Nations Sustainable Development Goals (SDGs) and Their Targets in English Scientific Abstracts</b><br><u>Clematide, S.</u> , <u>Volk, M.</u> , <u>Fankhauser, T.</u> , <u>Hilty, L.</u> , <u>Bernard, J.</u><br>Swiss Text Analytics Conference, Association for Computational Linguistics pp. 193-197, (2024).                                                                                               |                                                                                           |
|  | W036 | <b>Visualization and Automation in Data Science: Exploring the Paradox of Humans-in-the-Loop</b><br><u>Rogers, J.</u> , <u>Anastacio, M.</u> , <u>Bernard, J.</u> , <u>Chakhchoukh, M.</u> , <u>Faust, R.</u> , <u>Kerren, A.</u> , <u>Koch, S.</u> , <u>Kotthoff, L.</u> , <u>Turkay, C.</u> , <u>Wall, E.</u><br>IEEE VIS: Visualization in Data Science Symposium (VDS), IEEE (2024). doi: <a href="https://doi.org/10.1109/VDS63897.2024.00005">10.1109/VDS63897.2024.00005</a> |      |
|  | W035 | <b>ScrollyPOI: A Narrative-Driven Interactive Recommender System for Points-of-Interest Exploration and Explainability</b><br><u>Al-Hazwani, I.</u> , <u>Luo, T.</u> , <u>Inel, O.</u> , <u>Ricci, F.</u> , <u>El-Assady, M.</u> , <u>Bernard, J.</u><br>ACM Conference on User Modeling, Adaptation and Personalization (UMAP), Association for Computing Machinery pp. 292–304, (2024). doi: <a href="https://doi.org/10.1145/3631700.3665183">10.1145/3631700.3665183</a>        |      |
|  | W034 | <b>Tag-Xplore: Interactive Exploration of Annotation Practices in Digital Editions</b><br><u>Blum, M.</u> , <u>Sachdeva, M.</u> , <u>Stricker, Y.</u> , <u>Mumenthaler, R.</u> , <u>Bernard, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2024). doi: <a href="https://doi.org/10.2312/eurova.20241115">10.2312/eurova.20241115</a>                                                                                                       |      |



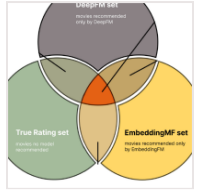
- W033 **Human-Based and Automatic Feature Ideation for Time Series Data: A Comparative Study**  
Schmidt, J., Piringer, H., Mühlbacher, T., **Bernard, J.**  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2023). doi:  
[10.2312/eurova.20231089](https://doi.org/10.2312/eurova.20231089)



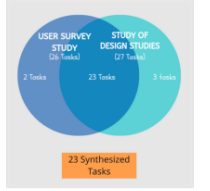
- W032 **Why am I reading this? Explaining Personalized News Recommender Systems**  
Arnórsson, S., Abeillon, F., Al-Hazwani, I., **Bernard, J.**, Hauptmann (Schäfer), H., El-Assady, M.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2023). doi:  
[10.2312/eurova.20231099](https://doi.org/10.2312/eurova.20231099)



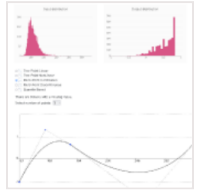
- W031 **What Shall We Watch Tonight? Why Sometimes Your Favourite Streaming Service Just Cannot Manage to Recommend Anything Interesting**  
Al-Hazwani, I., Morgenshtern, G., Rutishauser, Y., El-Assady, M., **Bernard, J.**  
IEEE VIS Workshop on Visualization for AI Explainability (2022).



- W030 **A Data-Centric Methodology and Task Typology for Time-Stamped Event Sequences**  
Peiris, Y., Barth, C., Huang, E., **Bernard, J.**  
VIS Workshop on Evaluation and Beyond — Methodological Approaches for Visualization (BELIV), IEEE pp. 66-76, (2022). doi: [10.1109/BELIV57783.2022.00012](https://doi.org/10.1109/BELIV57783.2022.00012)



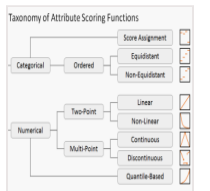
- W029 **RankASco: A Visual Analytics Approach to Leverage Attribute-Based User Preferences for Item Rankings**  
Schmid, J., Cibulski, L., Al-Hazwani, I., **Bernard, J.**  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2022). doi:  
[10.2312/eurova.20221072](https://doi.org/10.2312/eurova.20221072)



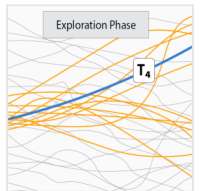
- W028 **Interactive Visual Explanation of Incremental Data Labeling**  
Beckmann, R., Blaga, C., El-Assady, M., Zeppelzauer, M., **Bernard, J.**  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2022). doi:  
[10.2312/eurova.20221073](https://doi.org/10.2312/eurova.20221073)



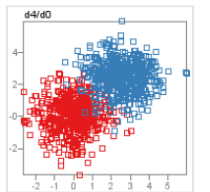
- W027 **A Taxonomy of Attribute Scoring Functions**  
Schmid, J., **Bernard, J.**  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2021). doi:  
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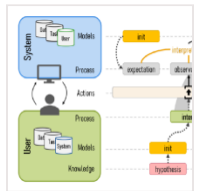
- W026 **LFPeers: Temporal Similarity Search in Covid-19 Data**  
Burmeister, J., **Bernard, J.**, Kohlhammer, J.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2021). doi:  
[10.2312/eurova.20211098](https://doi.org/10.2312/eurova.20211098)



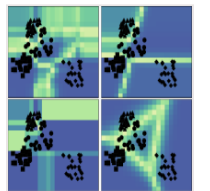
- W025 **SepEx: Visual Analysis of Class Separation Measures**  
**Bernard, J.**, Hutter, M., Zeppelzauer, M., Sedlmair, M., Munzner, T.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2020). doi:  
[10.2312/eurova.20201079](https://doi.org/10.2312/eurova.20201079)



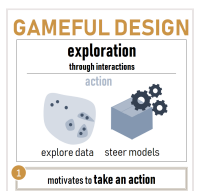
- W024 **Learning and Teaching in Co-Adaptive Guidance for Mixed-Initiative Visual Analytics**  
Sperrle, F., Jeitler, A., **Bernard, J.**, Keim, D., El-Assady, M.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2020). doi:  
[10.2312/eurova.20201088](https://doi.org/10.2312/eurova.20201088)



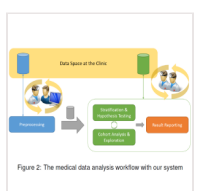
- W023 **Visual Analysis of Degree-of-Interest Functions to Support Selection Strategies for Instance Labeling**  
**Bernard, J.**, Hutter, M., Ritter, C., Lehmann, M., Sedlmair, M., Zeppelzauer, M.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2019). doi:  
<https://doi.org/10.2312/eurova.20191116>



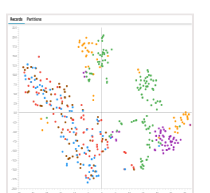
- W022 **Shall we play?—Extending the Visual Analytics Design Space through Gameful Design Concepts**  
Sevastjanova, R., Hauptmann (Schäfer), H., **Bernard, J.**, Keim, D., El-Assady, M.  
MLUI 2019: Machine Learning from User Interactions for Visualization and Analytics, IEEE VIS 2019 workshop (2019). doi: [10.1109/MLUI52769.2019.10075563](https://doi.org/10.1109/MLUI52769.2019.10075563)



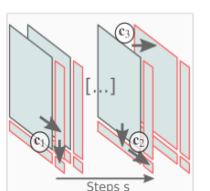
- W021 **Self-Service Data Preprocessing and Cohort Analysis for Medical Researchers**  
Burmeister, J., **Bernard, J.**, May, T., Kohlhammer, J.  
IEEE Workshop on Visual Analytics in Healthcare (VAHC) pp. 17-24, (2019). doi:  
[10.1109/VAHC47919.2019.8945040](https://doi.org/10.1109/VAHC47919.2019.8945040)



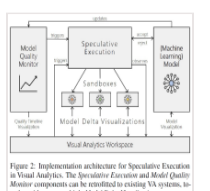
- W020 **mVis in the Wild: Pre-Study of an Interactive Visual Machine Learning System for Labelling**  
Chegini, M., **Bernard, J.**, Shao, L., Sourin, A., Andrews, K., Schreck, T.  
IEEE VIS 2019 Workshop on Evaluation of Interactive Visual Machine Learning Systems (2019).



- W019 **Quantifying Uncertainty in Multivariate Time Series Pre-Processing**  
Bors, C., **Bernard, J.**, Bögl, M., Gschwandtner, T., Kohlhammer, J., Miksch, S.  
EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2019). doi:  
[10.2312/eurova.20191121](https://doi.org/10.2312/eurova.20191121)



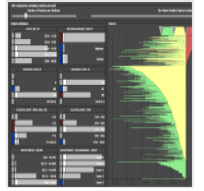
- W018 **Speculative Execution for Guided Visual Analytics**  
Sperrle, F., **Bernard, J.**, Sedlmair, M., Keim, D., El-Assady, M.  
VIS Workshop on Machine Learning from User Interaction for Visualization and Analytics, IEEE (2018). doi: [10.1109/MLUI52768.2018.10075559](https://doi.org/10.1109/MLUI52768.2018.10075559)



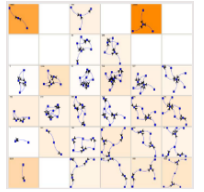
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|--|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  | W017 | <b>Minions, Sheep, and Fruits: Metaphorical Narratives to Explain Artificial Intelligence and Build Trust</b><br><u>Jentner, W., Sevastjanova, R., Stoffel, F., Keim, D., Bernard, J., El-Assady, M.</u><br>IEEE VIS Workshop on Visualization for AI Explainability (2018). doi: <a href="https://doi.org/urn:nbn:de:bsz:352-2-1q5oi0xg28s59">urn:nbn:de:bsz:352-2-1q5oi0xg28s59</a>    |  |  |
|  | W016 | <b>Computer-supported Interactive Assignment of Keywords for Literature Collections</b><br><u>Agarwal, S., Bernard, J., Beck, F.</u><br>IEEE VIS Workshop on Machine Learning from User Interaction for Visualization and Analytics, IEEE (2018).                                                                                                                                        |  |  |
|  | W015 | <b>Lowering the Barrier for Successful Replication and Evaluation</b><br><u>Lücke-Tieke, H., Beuth, M., Schader, P., May, T., Bernard, J., Kohlhammer, J.</u><br>IEEE VIS Workshop on Evaluation and Beyond - Methodological Approaches for Visualizations (BELIV), IEEE (2018).                                                                                                         |  |  |
|  | W014 | <b>Personalized Visual-Interactive Music Classification</b><br><u>Ritter, C., Altenhofen, C., Zeppelzauer, M., Kuijper, A., Schreck, T., Bernard, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2018). doi: <a href="https://doi.org/10.2312/eurova.20181109">10.2312/eurova.20181109</a>                                                       |  |  |
|  | W013 | <b>Combining the Automated Segmentation and Visual Analysis of Multivariate Time Series</b><br><u>Bernard, J., Bors, C., Bögl, M., Eichner, C., Gschwandtner, T., Miksch, S., Schumann, H., Kohlhammer, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2018). doi: <a href="https://doi.org/10.2312/eurova.20181112">10.2312/eurova.20181112</a> |  |  |
|  | W012 | <b>A Unified Process for Visual-Interactive Labeling</b><br><u>Bernard, J., Zeppelzauer, M., Sedlmair, M., Aigner, W.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2017). doi: <a href="https://doi.org/10.2312/eurova.20171123">10.2312/eurova.20171123</a>                                                                                      |  |  |
|  | W011 | <b>Visual analytics for radiomics: Combining medical imaging with patient data for clinical research</b><br><u>Bannach, A., Bernard, J., Jung, F., Kohlhammer, J., May, T., Scheckenbach, K., Wesarg, S.</u><br>IEEE Workshop on Visual Analytics in Healthcare (VAHC), IEEE pp. 84-91, (2017). doi: <a href="https://doi.org/10.1109/VAHC.2017.8387545">10.1109/VAHC.2017.8387545</a>   |  |  |
|  | W010 | <b>Combining Cluster and Outlier Analysis with Visual Analytics</b><br><u>Bernard, J., Dobermann, E., Sedlmair, M., Fellner, D.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2017). doi: <a href="https://doi.org/10.2312/eurova.20171114">10.2312/eurova.20171114</a>                                                                            |  |  |
|  | W009 | <b>Structuring the Strategies for Integrating Visualization into Automated Modeling Techniques for Visual Analytics</b><br><u>May, T., Bernard, J., Kohlhammer, J.</u><br>IEEE VIS Workshop on Creation, Curation, Critique and Conditioning of Principles and Guidelines in Visualization (C4PGV) (2016).                                                                               |  |  |
|  | W008 | <b>Visual-Interactive Segmentation of Multivariate Time Series</b><br><u>Bernard, J., Dobermann, E., Bögl, M., Röhlig, M., Vögele, A., Kohlhammer, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2016). doi: <a href="https://doi.org/10.2312/eurova.20161121">10.2312/eurova.20161121</a>                                                      |  |  |
|  | W007 | <b>Visual-Interactive Exploration of Relations Between Time-Oriented Data and Multivariate Data</b><br><u>Bernard, J., Sessler, D., Steiger, M., Spott, M., Kohlhammer, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2016). doi: <a href="https://doi.org/10.2312/eurova.20161124">10.2312/eurova.20161124</a>                                 |  |  |
|  | W006 | <b>Methods and a research agenda for the evaluation of event sequence visualization techniques</b><br><u>Ruddle, R., Bernard, J., May, T., Lücke-Tieke, H., Kohlhammer, J.</u><br>IEEE VIS 2016 Workshop on Temporal & Sequential Event Analysis. (2016). doi: <a href="https://eprints.whiterose.ac.uk/id/eprint/106008/">https://eprints.whiterose.ac.uk/id/eprint/106008/</a>         |  |  |
|  | W005 | <b>Visual-Interactive Text Analysis to Support Political Decision Making - From Sentiments to Arguments to Policies</b><br><u>Ruppert, T., Bernard, J., Lücke-Tieke, H., May, T., Kohlhammer, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2015). doi: <a href="https://doi.org/10.2312/eurova.20151101">10.2312/eurova.20151101</a>           |  |  |
|  | W004 | <b>Visual Analysis of Relations in Attributed Time-Series Data</b><br><u>Steiger, M., Bernard, J., Schader, P., Kohlhammer, J.</u><br>EuroVis Workshop on Visual Analytics (EuroVA), The Eurographics Association (2015). doi: <a href="https://doi.org/10.2312/eurova.20151105">10.2312/eurova.20151105</a>                                                                             |  |  |
|  | W003 | <b>A Visual Active Learning System for the Assessment of Patient Well-being in Prostate Cancer Research</b><br><u>Bernard, J., Sessler, D., Bannach, A., May, T., Kohlhammer, J.</u><br>IEEE VIS Workshop on Visual Analytics in Healthcare, ACM pp. 1-8, (2015). doi: <a href="https://doi.org/10.1145/2836034.2836035">10.1145/2836034.2836035</a>                                     |  |  |



- W002 **A Visual-interactive System for Prostate Cancer Stratifications**  
**Bernard, J.**, [Sessler, D.](#), [May, T.](#), [Schlomm, T.](#), [Pehrke, D.](#), [Kohlhammer, J.](#)  
IEEE Vis Workshop on Visualizing Electronic Health Record Data (EHRVis), IEEE Computer Society (2014).



- W001 **Smart Query Definition for Content-Based Search in Large Sets of Graphs**  
[von Landesberger, T.](#), [Bremm, S.](#), **Bernard, J.**, [Schreck, T.](#)  
International Symposium on Visual Analytics Science and Technology, Eurographics Association pp. 7-12, (2010). doi: [/10.2312/PE/EuroVAST/EuroVAST10/007-012](#)



## Peer-reviewed Short Papers



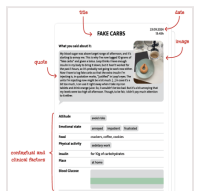
- S011 **Future Challenges and Unsolved Problems in Health Visualization**  
**Bernard, J.**, [Borland, D.](#), [Laramée, R.](#), [Preim, B.](#), [Raidou, R.](#), [Vilanova, A.](#)  
EuroVis 2025 - Panels and Tutorials, The Eurographics Association (2025). doi: [10.2312/evt.20251119](#)



- S010 **Data Humanism Decoded: A Characterization of its Principles to Bridge Data Visualization Researchers and Practitioners**  
[Al-Hazwani, I.](#), [Zhang, K.](#), [Garrison, L.](#), **Bernard, J.**  
IEEE Visualization Conference - Short Papers, IEEE (2025). doi: [https://doi.org/10.48550/arXiv.2509.00440](#)



- S009 **Incident Cards: A Tool for Documenting and Reviewing Experiences with Chronic Conditions**  
[Barth, C.](#), [Fedosov, A.](#), **Bernard, J.**, [Morgenshtern, G.](#), [Huang, E.](#)  
Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems, Association for Computing Machinery (2025). doi: [10.1145/3706599.3720194](#)



- S008 **Reflections on interactive visualization of electronic health records: past, present, future**  
[Arleo, A.](#), [Chen, A.](#), [Gotz, D.](#), [Kandaswamy, S.](#), **Bernard, J.**  
Journal of the American Medical Informatics Association pp. 2423-2428, (2024). doi: [10.1093/jamia/ocae249](#)



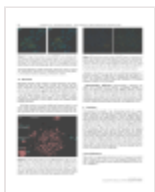
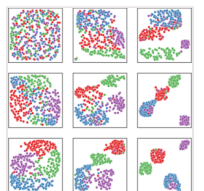
- S007 **The Future of Interactive Data Analysis and Visualization**  
**Bernard, J.**, [El-Assady, M.](#)  
EuroVis 2023 - Panel, The Eurographics Association (2023). doi: [10.2312/evt.20231119](#)



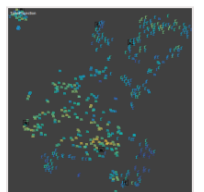
- S006 **RiskFix: Supporting Expert Validation of Predictive Timeseries Models in High-Intensity Settings**  
[Morgenshtern, G.](#), [Verma, A.](#), [Tonekaboni, S.](#), [Greer, R.](#), **Bernard, J.**, [Mazwi, M.](#), [Goldenberg, A.](#), [Chevalier, F.](#)  
EuroVis 2023 - Short Papers, The Eurographics Association (2023). doi: [10.2312/evs.20231036](#)



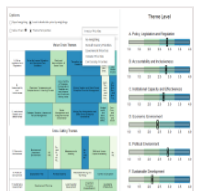
- S005 **Does the Layout Really Matter? A Study on Visual Model Accuracy Estimation**  
[Grossmann, N.](#), **Bernard, J.**, [Sedlmair, M.](#), [Waldner, M.](#)  
IEEE Visualization Conference - Short Papers, IEEE pp. 61-65, (2021). doi: [10.1109/VIS49827.2021.9623326](#)



- S004 **Learning from the Best - Visual Analysis of a Quasi-Optimal Data Labeling Strategy**  
**Bernard, J.**, [Hutter, M.](#), [Lehmann, M.](#), [Müller, M.](#), [Zeppelzauer, M.](#), [Sedlmair, M.](#)  
EuroVis 2018 - Short Papers, The Eurographics Association (2018). doi: [10.2312/eurovisshort.20181085](#)



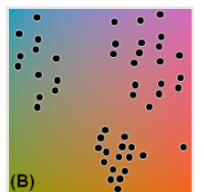
- S003 **Visual Access to Performance Indicators in the Mining Sector**  
[Ruppert, T.](#), [Bannach, A.](#), **Bernard, J.**, [Lokanc, M.](#), [Kohlhammer, J.](#)  
EuroVis 2017 - Short Papers, The Eurographics Association (2017). doi: [10.2312/eurovisshort.20171150](#)



- S002 **Visual Analytics of Work Behavior Data - Insights on Individual Differences**  
[Koldijk, S.](#), **Bernard, J.**, [Ruppert, T.](#), [Kohlhammer, J.](#), [Neerincx, M.](#), [Kraaij, W.](#)  
Eurographics Conference on Visualization (EuroVis) - Short Papers, The Eurographics Association (2015). doi: [10.2312/eurovisshort.20151129](#)



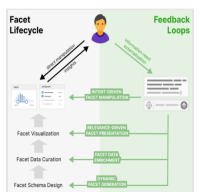
- S001 **Revisiting Perceptually Optimized Color Mapping for High-Dimensional Data Analysis**  
[Mittelstädt, S.](#), **Bernard, J.**, [Schreck, T.](#), [Steiger, M.](#), [Kohlhammer, J.](#), [Keim, D.](#)  
EuroVis - Short Papers, The Eurographics Association (2014). doi: [10.2312/eurovisshort.20141163](#)



## Posters

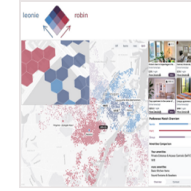


- O16 **Feedback Loops in Faceted Search: Potential and Challenges for Dynamic Information Landscapes**  
[Blum, M.](#), **Bernard, J.**  
EuroVis 2026 - Posters and Demos, Eurographics (2026). doi: [10.2312/evpd.20261010](#)





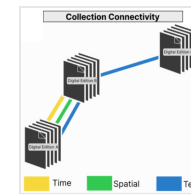
O015 **PRISM: From Individual Preferences to Group Consensus through Conversational AI-Mediated and Visual Explanations**  
[Al-Hazwani, I.](#), [Aschwanden, O.](#), [Inel, O.](#), **[Bernard, J.](#)**, [Boratto, L.](#)  
ACM Conference on Recommender Systems, Association for Computing Machinery pp. 1343–1345, (2025). doi: [10.1145/3705328.3759340](#)



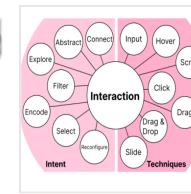
O014 **Blooming Beats: An Interactive Music Recommender System Grounded in TRACE Principles and Data Humanism**  
[Al-Hazwani, I.](#), [Lutziger, D.](#), [Kirchdorfer, C.](#), [Huber, L.](#), [Aschwanden, O.](#), **[Bernard, J.](#)**, [Boratto, L.](#)  
ACM Conference on Recommender Systems (RecSys), Association for Computing Machinery pp. 1331–1333, (2025). doi: [10.1145/3705328.3759337](#)



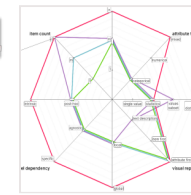
O013 **ORD-Xplore: Bridging Open Research Data Collections through Modality Abstractions**  
[Sachdeva, M.](#), [Blum, M.](#), [Stricker, Y.](#), [Schreck, T.](#), [Mumenthaler, R.](#), **[Bernard, J.](#)**  
EuroVis 2023 - Posters, The Eurographics Association (2023). doi: [10.2312/evp.20231065](#)



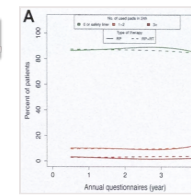
O012 **Interaction Tasks for Explainable Recommender Systems**  
[Al-Hazwani, I.](#), [Alahmadi, T.](#), [Wardatzky, K.](#), [Inel, O.](#), [El-Assady, M.](#), **[Bernard, J.](#)**  
EuroVis 2023 - Posters, The Eurographics Association (2023). doi: [10.2312/evp.20231062](#)



O011 **A Design Space for Explainable Ranking and Ranking Models**  
[Al-Hazwani, I.](#), [Schmid, J.](#), [Sachdeva, M.](#), **[Bernard, J.](#)**  
EuroVis 2022 - Posters, The Eurographics Association (2022). doi: [10.2312/evp.20221114](#)



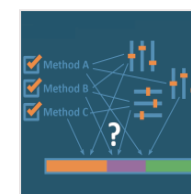
O010 **Toxicity in a Multimodality Approach of Radical Prostatectomy with Radiation and Hormonal Therapy**  
[Loeb, S.](#), [Adam, M.](#), [Tennstedt, P.](#), [Huber, W.](#), **[Bernard, J.](#)**, [Tilki, D.](#), [Graefen, M.](#), [Huland, H.](#), [Schlomm, T.](#)  
Genitourinary Cancers Symposium (2016). doi: [10.1200/jco.2016.34.2\\_suppl.107](#)



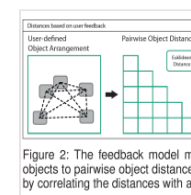
O009 **Towards Combining Attribute-based and Time Series-based Visual Querying**  
[Sessler, D.](#), [Spott, M.](#), [Nauck, D.](#), [Harmer, W.](#), [Kohlhammer, J.](#), **[Bernard, J.](#)**  
EuroVis 2016 - Posters, The Eurographics Association (2016). doi: [10.2312/eurp.20161145](#)



O008 **Enhancing Time Series Segmentation and Labeling Through the Knowledge Generation Model**  
[Gschwandtner, T.](#), [Schumann, H.](#), **[Bernard, J.](#)**, [May, T.](#), [Bögl, M.](#), [Miksch, S.](#), [Kohlhammer, J.](#), [Röhlig, M.](#), [Alsallakh, B.](#)  
Eurographics Conference on Visualization (EuroVis) - Poster, The Eurographics Association (2015).



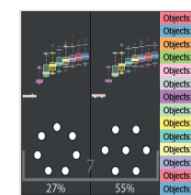
O007 **Towards a User-Defined Visual-Interactive Definition of Similarity Functions for Mixed Data**  
**[Bernard, J.](#)**, [Sessler, D.](#), [Behrisch, M.](#), [Hutter, M.](#), [Schreck, T.](#), [Kohlhammer, J.](#)  
IEEE Symposium on Visual Analytics Science and Technology (Poster Paper) (2014). doi: [10.1109/VAST.2014.7042503](#)



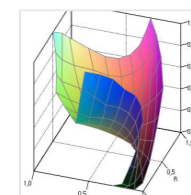
O006 **Towards a Tighter Coupling of Visualization and Public Policy Making**  
[Ruppert, T.](#), **[Bernard, J.](#)**, [Lücke-Tieke, H.](#), [Kohlhammer, J.](#)  
Proc. IEEE Symposium on Visual Analytics Science and Technology (Poster Paper) (2014). doi: [10.1109/VAST.2014.7042525](#)



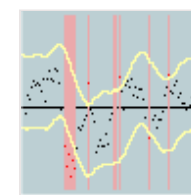
O005 **Adopting Mental Similarity Notions of Categorical Data Objects to Algorithmic Similarity Functions**  
[Sessler, D.](#), **[Bernard, J.](#)**, [Kuijper, A.](#), [Kohlhammer, J.](#)  
Vision, Modelling and Visualization (VMV) (2014). doi: [10.13140/RG.2.2.19683.25129](#)



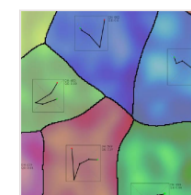
O004 **Interactive Multi-Criteria Optimization of 2D Color Maps**  
[Hutter, M.](#), [Steiger, M.](#), **[Bernard, J.](#)**, [Zurloh, C.](#), [Kohlhammer, J.](#)  
Vision, Modelling and Visualization (VMV) (2014). doi: [10.13140/RG.2.2.34782.74560](#)



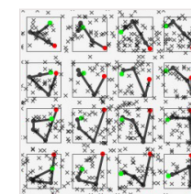
O003 **Visual Exploration of Local Interest Points in Sets of Time Series**  
[Schreck, T.](#), [Sharalieva, L.](#), [Wanner, F.](#), **[Bernard, J.](#)**, [Ruppert, T.](#), [von Landesberger, T.](#), [Bustos, B.](#)  
Proceedings of IEEE Symposium on Visual Analytics Science and Technology (Poster Paper) (2012). doi: [10.1109/VAST.2012.6400534](#)



O002 **Cluster Correspondence Views for Enhanced Analysis of SOM Displays**  
**[Bernard, J.](#)**, [von Landesberger, T.](#), [Bremm, S.](#), [Schreck, T.](#)  
IEEE Symposium on Visual Analytics Science and Technology pp. 217-218, (2010). doi: [10.1109/VAST.2010.5651676](#)



O001 **Micro-Macro Views for Visual Trajectory Cluster Analysis**  
**[Bernard, J.](#)**, [von Landesberger, T.](#), [Bremm, S.](#), [Schreck, T.](#)  
Eurographics/IEEE Symposium on Visualization (2009).





D008 **SwissText 2024 Shared Task: Automatic Classification of the United Nations Sustainable Development Goals (SDGs) and Their Targets in English Scientific Abstracts**  
Clematide, S., Volk, M., Fankhauser, T., Hilty, L., **Bernard, J.**  
Swiss Text Analytics Conference, Association for Computational Linguistics pp. 193-197, (2024). doi:  
<https://doi.org/10.5167/uzh-275614>



D007 **100 Synthetic Datasets for the Analysis of Class Separation Measures**  
**Bernard, J., Hutter, M., Zeppelzauer, M., Sedlmair, M., Munzner, T.**  
Used in Publication - SepEx: Visual Analysis of Class Separation Measures (2020).



D006 **30 years of synoptic observations from Neumayer Station with links to datasets**  
**Bernard, J., König-Langlo, G., Sieger, R.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2014). doi:  
[10.1594/PANGAEA.150017](https://doi.org/10.1594/PANGAEA.150017)



D005 **Reference list of 120 datasets from time series station Payerne used for exploratory search**  
**Bernard, J., Wilhelm, N., Scherer, M., May, T., Schreck, T.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2012). doi:  
[doi:10.1594/PANGAEA.783598](https://doi.org/10.1594/PANGAEA.783598)



D004 **Reference list of 265 sources used for the discovery of relationships between data clusters and metadata properties**  
**Bernard, J., Ruppert, T., Scherer, M., Schreck, T., Kohlhammer, J.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2012). doi:  
[doi:10.1594/PANGAEA.785666](https://doi.org/10.1594/PANGAEA.785666)



D003 **Reference list of 269 sources used for exploratory search**  
**Bernard, J., Ruppert, T., Scherer, M., Schreck, T.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2012). doi:  
[10.1594/PANGAEA.778638](https://doi.org/10.1594/PANGAEA.778638)



D002 **Time-oriented earth observation measurements from the Baseline Surface Radiation Network (BSRN) in the years 1992 to 2012, reference list of 6813 datasets**  
**Bernard, J., König-Langlo, G., Sieger, R.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2012). doi:  
[doi:10.1594/PANGAEA.787726](https://doi.org/10.1594/PANGAEA.787726)



D001 **Reference list of sources used for two experimental data files dataBSRN and dataMixed**  
**Scherer, M., Bernard, J., Schreck, T.**  
PANGAEA - Data Publisher for Earth and Environmental Science (2011). doi:  
[doi:10.1594/PANGAEA.756307](https://doi.org/10.1594/PANGAEA.756307)

