

Big data analytics in association rule mining : a systematic literature review

Shahin, Mahtab; Arakkal Peious, Sijo; Sharma, Rahul; Kaushik, Minakshi; Ben Yahia, Sadok; Shah, Syed Attique; Draheim, Dirk BDET 2021: 2021 the 3rd International Conference on Big Data Engineering and Technology (BDET) : proceedings 2021 / p. 40-49 <https://doi.org/10.1145/3474944.3474951> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Cluster-based association rule mining for an intersection accident dataset

Shahin, Mahtab; Saeidi, Soheila; Shah, Syed Attique; Kaushik, Minakshi; Sharma, Rahul; Arakkal Peious, Sijo; Draheim, Dirk 2021 International Conference on Computing, Electronic and Electrical Engineering (ICE Cube), 26-27 November 2021 : proceedings 2021 / p. <https://doi.org/10.1109/ICECube53880.2021.9628206>

DatApollo : Orchestration of serverless functions for scalable data mining

Shahin, Mahtab; Bertl, Markus; Janatian, Nasim; Aznar-Poveda, Juan; Shah, Syed Attique; Fahringer, Thomas; Arakkal Peious, Sijo; Draheim, Dirk IEEE Access 2025 / p. 142813-142828 <https://doi.org/10.1109/ACCESS.2025.3591712>

Detecting Simpson's paradox : a machine learning perspective

Sharma, Rahul; Garayev, Huseyn; Kaushik, Minakshi; Arakkal Peious, Sijo; Tiwari, Prauag; Draheim, Dirk Database and Expert Systems Applications : 33rd International Conference, DEXA 2022, Vienna, Austria, August 22-24, 2022 : proceedings. Part I 2022 / p. 323-335 : ill https://doi.org/10.1007/978-3-031-12423-5_25 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Detecting Simpson's paradox : a step towards fairness in machine learning

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Bertl, Markus; Ankit, Vidyarthi; Ashwani, Kumar; Draheim, Dirk New Trends in Database and Information Systems : ADBIS 2022 Short Papers, Doctoral Consortium and Workshops : DOING, K-GALS, MADEISD, MegaData, SWODCH, Turin, Italy, September 5-8, 2022 : proceedings 2022 / p. 67-76 : ill https://doi.org/10.1007/978-3-031-15743-1_7 [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Enabling sensemaking and trust in communities : an organizational perspective

Arakkal Peious, Sijo; Suran, Shweta; Pattanaik, Vishwajeet; Draheim, Dirk iiWAS2021: The 23rd International Conference on Information Integration and Web Intelligence : November 29-December 1, 2021, Linz, Austria : proceedings 2021 / p. 95-103 : ill <https://doi.org/10.1145/3487664.3487678> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Existence of the Yule-Simpson effect : an experiment with continuous data

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Shahin, Mahtab; Vidyarthi, Ankit; Draheim, Dirk Proceedings of the Confluence 2022 : 12th International Conference on Cloud Computing, Data Science & Engineering, 27-28 January 2022 : Virtual 2022 / p. 351-355 <https://doi.org/10.1109/Confluence52989.2022.9734211>

Expected vs. unexpected : selecting right measures of interestingness

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Ben Yahia, Sadok; Draheim, Dirk Big Data Analytics and Knowledge Discovery : 22nd International Conference, DaWaK 2020, Bratislava, Slovakia, September 14-17, 2020 : proceedings 2020 / p. 38-47 https://doi.org/10.1007/978-3-030-59065-9_4 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Grand reports : a tool for generalizing association rule mining to numeric target values

Arakkal Peious, Sijo; Sharma, Rahul; Kaushik, Minakshi; Shah, Syed Attique; Ben Yahia, Sadok Big Data Analytics and Knowledge Discovery : 22nd International Conference, DaWaK 2020, Bratislava, Slovakia, September 14-17, 2020 : proceedings 2020 / p. 28-37 https://doi.org/10.1007/978-3-030-59065-9_3 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Impact-driven discretization of numerical factors : case of two- and three-partitioning

Kaushik, Minakshi; Sharma, Rahul; Arakkal Peious, Sijo; Draheim, Dirk Big Data Analytics. BDA 2021 : 9th International Conference, BDA 2021, Virtual Event, December 15-18, 2021 : proceedings 2021 / p. 244-260 https://doi.org/10.1007/978-3-030-93620-4_18 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Measures of Impact and Confounding – An Analysis and Experimental Comparison of Novel and Established Measures = Möju ja segajate mõõdikud – uute ja väljakujunenud meetmete analüüs ja eksperimentaalne võrdlus

Arakkal Peious, Sijo 2025 https://www.ester.ee/record=b5745850*est <https://digikogu.taltech.ee/et/Item/81726e4a-6f3a-429b-8580-ae7710da881d> <https://doi.org/10.23658/taltech.24/2025>

A novel framework for unification of association rule mining, online analytical processing and statistical reasoning

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Bazin, Alexandre; Shah, Syed Attique; Istok, Fister jr.; Ben Yahia, Sadok; Draheim, Dirk IEEE Access 2022 / p. 12792-12813 <https://doi.org/10.1109/ACCESS.2022.3142537> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An analysis of human perception of partitions of numerical factor domains

Kaushik, Minakshi; Sharma, Rahul; Shahin, Mahtab; Arakkal Peious, Sijo; Draheim, Dirk Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) ; Vol. 13635 LNCS 2022 / p. 137-144

https://doi.org/10.1007/978-3-031-21047-1_13 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

On Choosing the Columnar In-Memory Database Hyrise as High-Performant Implementation Platform for the Grandreport Tool

Arakkal Peious, Sijo; Kaushik, Minakshi; Shahin, Mahtab; Sharma, Rahul; Draheim, Dirk techrxiv.org 2025 / 7 p
<http://doi.org/10.36227/techrxiv.174015861.15410981/v1>

On measuring confounding bias in mixed multidimensional data : case of coerced multiple linear regression adjustment

Arakkal Peious, Sijo; Kaushik, Minakshi; Shah, Syed Attique; Sharma, Rahul; Suran, Shweta; Draheim, Dirk *ICT for Intelligent Systems* : proceedings of ICTIS 2024. Vol. 6 2024 / p. 329–342 https://doi.org/10.1007/978-981-97-6684-0_27 [Conference proceedings at Scopus](#) [Article at Scopus](#)

On observing patterns of correlations during drill-down

Arakkal Peious, Sijo; Sharma, Rahul; Kaushik, Minakshi; Shahin, Mahtab; Draheim, Dirk *Information Integration and Web Intelligence*, 25th International Conference, iiWAS 2023, Denpasar, Bali, Indonesia, December 4–6, 2023 : proceedings 2023 / p. 134–143 : ill https://doi.org/10.1007/978-3-031-48316-5_16 [Conference proceedings at Scopus](#) [Article at Scopus](#)

On the potential of numerical association rule mining

Kaushik, Minakshi; Sharma, Rahul; Arakkal Peious, Sijo; Shahin, Mahtab; Ben Yahia, Sadok; Draheim, Dirk *Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications* : 7th International Conference, FDSE 2020, Quy Nhon, Vietnam, November 25–27, 2020 : proceedings 2020 / p. 3–20 https://doi.org/10.1007/978-981-33-4370-2_1 [Conference proceeding at Scopus](#) [Article at Scopus](#)

A systematic assessment of numerical association rule mining methods

Kaushik, Minakshi; Sharma, Rahul; Arakkal Peious, Sijo; Shahin, Mahtab; Ben Yahia, Sadok; Draheim, Dirk *SN Computer Science* 2021 / art. 348 <https://doi.org/10.1007/s42979-021-00725-2> [Journal metrics at Scopus](#) [Article at scopus](#)

Towards unification of statistical reasoning, OLAP and association rule mining : semantics and pragmatics

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Shahin, Mahtab; Draheim, Dirk *Database Systems for Advanced Applications* : 27th International Conference, DASFAA 2022, Virtual Event, April 11–14, 2022 : proceedings. Part I 2022 / p. 596–603 https://doi.org/10.1007/978-3-031-00123-9_48 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Why not to trust big data : discussing statistical paradoxes

Sharma, Rahul; Kaushik, Minakshi; Arakkal Peious, Sijo; Shahin, Mahtab; Vidyarthi, Ankit; Tiwari, Prayag; Draheim, Dirk *Database Systems for Advanced Applications* : DASFAA 2022, International Workshops BDMS, BDQM, GDMA, IWB, MATQTD, and PMBD, Virtual Event, April 11–14, 2022 : proceedings 2022 / p. 50–63 : ill https://doi.org/10.1007/978-3-031-11217-1_4 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference proceedings at WOS](#) [Article at WOS](#)