

Publications Dr N.R.T.P. van Beest

1 October 2023

Journals

1. van Beest, N.R.T.P., Groefsema, H., Cryer, A., Governatori, G., Colombo Tosatto, S., Burke, H.: Cross-instance regulatory compliance checking of business process event logs. *IEEE Transactions on Software Engineering* (2023).
2. Su, Z., Polyvyanyy, A., Lipovetzky, N., Sardiña, S., van Beest, N.R.T.P.: Fast and accurate data-driven goal recognition using process mining techniques. *Artificial Intelligence* **323** (2023) 103973.
3. van Beest, M.R.R.S., Arpino, F., Hlinka, O., Sauret, E., van Beest, N.R.T.P., Humphries, R.S., Buonanno, G., Morawska, L., Governatori, G., Motta, N.: Influence of indoor airflow on particle spread of a single breath and cough in enclosures: Does opening a window really ‘help’? *Atmospheric Pollution Research* (2022) 101473.
4. Groefsema, H., van Beest, N.R.T.P., Armas-Cervantes, A.: Efficient conditional compliance checking of business process models. *Computers in Industry* **115** (2020) 103181.
5. Van Beest, N.R.T.P., Groefsema, H., García-Bañuelos, L., Aiello, M.: Variability in business processes: automatically obtaining a generic specification. *Information Systems* **80** (2019) 36–55.
6. Ghanbari Ghooshchi, N., Van Beest, N.R.T.P., Governatori, G., Olivieri, F., Sattar, A.: Synthesis of compliant business processes. *IEEE Transactions on Services Computing* (2018).
7. García-Bañuelos, L., Van Beest, N.R.T.P., Dumas, M., La Rosa, M., Mertens, W.: Complete and interpretable conformance checking of business processes. *IEEE Transactions on Software Engineering* **44** (2018) 262–290.
8. Groefsema, H., Van Beest, N.R.T.P., Aiello, M.: A formal model for compliance verification of service compositions. at *IEEE Transactions on Services Computing* **11** (2018) 466–479.
9. Van Beest, N.R.T.P., Kaldeli, E., Bulanov, P., Wortmann, J.C., Lazovik, A.: Automated runtime repair of business processes. *Information Systems* **39** (2014) 45–79.
10. Mărușter, L., Van Beest, N.R.T.P.: Redesigning business processes: a methodology based on simulation and process mining techniques. *Knowledge and Information Systems* **21**(3) (2009) 267–297.

Conferences

11. Su, Z., Yu, T., Lipovetzky, N., Mohammadi, A., Oetomo, D., Polyvyanyy, A., Sardina, S., Tan, Y., van Beest, N.: Data-driven goal recognition in transhumeral prostheses using process mining techniques. In: *The 5th International Conference on Process Mining*. (2023).
12. Groefsema, H., van Beest, N.R.T.P., Governatori, G.: On the use of the conformance and compliance keywords during verification of business processes. In: *The 20th International Conference on Business Process Management*, Springer (2022).
13. Colombo Tosatto, S., van Beest, N.R.T.P.: Dealing with unexpected runtime outcomes within process models. In: *The 20th International Conference on Business Process Management*, Springer (2022).

14. Tosatto, S.C., Governatori, G., van Beest, N.R.T.P.: Verifying compliance of process compositions through certification of its components. In: 2020 IEEE 24th International Enterprise Distributed Object Computing Conference (EDOC), IEEE Computer Society (2020) 87–96.
15. Colombo Tosatto, S., Governatori, G., van Beest, N.R.T.P.: Checking regulatory compliance: Will we live to see it? In: International Conference on Business Process Management, Springer (2019) 119–138.
16. Ferraro, G., Lam, H.P., Tosatto, S.C., Olivieri, F., Islam, M.B., van Beest, N.R.T.P., Governatori, G.: Automatic extraction of legal norms: Evaluation of natural language processing tools. In: JSAI International Symposium on Artificial Intelligence, Springer (2019) 64–81.
17. Olivieri, F., G.G.C.M., Van Beest, N.R.T.P., Colombo Tossatto, S.: Resource-driven substructural defeasible logic. In: International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2018), Springer International Publishing (2018).
18. Klinkmüller, C., Van Beest, N.R.T.P., Weber, I.: Towards reliable predictive process monitoring. In: CAiSE 2018, Lecture Notes in Business Information Processing, Springer International Publishing (2018).
19. Olivieri, F., Governatori, G., Van Beest, N.R.T.P., Ghanbari Ghooshchi, N.: Declarative approaches for compliance by design. In: Lecture Notes in Business Information Processing 234, Springer International Publishing (2018).
20. Armas Cervantes, A., van Beest, N.R.T.P., La Rosa, M., Dumas, M., García-Bañuelos, L.: Interactive and incremental business process model repair. In: International Conference on Cooperative Information Systems, Springer (2017) 53–74.
21. Ghanbari Ghooshchi, N., Van Beest, N.R.T.P., Governatori, G., Olivieri, F., Sattar, A.: Visualisation of compliant declarative business processes. In: Enterprise Distributed Object Computing Conference (EDOC), 2017 IEEE 21st International, IEEE (2017) 89–94.
22. Van Beest, N.R.T.P., Dumas, M., García-Bañuelos, L., La Rosa, M.: Log delta analysis: Interpretable differencing of business process event logs. In: Proc. of BPM 2015, Springer (2015) 386–405.
23. Groefsema, H., Van Beest, N.R.T.P.: Design-time compliance of service compositions in dynamic service environments. In: Service-Oriented Computing and Applications (SOCA), 2015 IEEE 8th International Conference on, IEEE (2015) 108–115.
24. D’Souza, A., Van Beest, N.R.T.P., Huitema, G.B., Wortmann, J.C., Velthuisen, H. In: A Review and Evaluation of Business Model Ontologies: A Viability Perspective. Springer International Publishing (2015) 453–471.
25. Van Beest, N.R.T.P., Russell, N., Ter Hofstede, A., Lazovik, A.: Achieving intention-centric bpm through automated planning. In: International Conference on Service-Oriented Computing and Applications. (2014).
26. D’Souza, A., Van Beest, N.R.T.P., Huitema, G.B., Wortmann, J.C., Velthuisen, H.: An assessment framework for business model ontologies to ensure the viability of business models. In: Proceedings of the 16th International Conference on Enterprise Information Systems (ICEIS). (2014) 226–235.
27. Van Wijk, Y., Van Beest, N.R.T.P., De Bakker, K.F.C., Wortmann, J.C.: Assurance in collaborative ict-enabled service chains. In: Proceedings of the 16th International Conference on Enterprise Information Systems (ICEIS). (2014) 368–375.
28. Van Beest, N.R.T.P., Bucur, D.: Continuous correctness of business processes against process interference. In: Service-Oriented Computing and Applications (SOCA), 2013 IEEE 6th International Conference on, IEEE (2013) 110–117.
29. Van Beest, N.R.T.P., Bulanov, P., Wortmann, J.C., Lazovik, A.: Resolving business process interference via dynamic reconfiguration. In: International Conference on Service-Oriented Computing. Volume 6470/2010., Springer (2010) 47–60.

30. Van Beest, N.R.T.P., Szirbik, N.B., Wortmann, J.C.: Assessing the interference in concurrent business processes. In: Proceedings of the 12th International Conference on Enterprise Information Systems. Volume 3. (2010) 261–270.
31. Van Beest, N.R.T.P., Szirbik, N.B., Wortmann, J.C.: A vision for agile model-driven enterprise information systems. In: Proceedings of the 11th International Conference on Enterprise Information Systems. (2009) 188–193.
32. Van Beest, N.R.T.P., Maruster, L.: A process mining approach to redesign business processes - a case study in gas industry. In: Symbolic and Numeric Algorithms for Scientific Computing, 2007. SYNASC. International Symposium on, IEEE (2007) 541–548.
33. Meijler, T.D., Kruithof, G., Van Beest, N.R.T.P.: Top down versus bottom up in service-oriented integration: an mda-based solution for minimizing technology coupling. In: International Conference on Service-Oriented Computing, Springer (2006) 484–489.

Workshops

34. Su, Z., Polyvyanyy, A., Lipovetzky, N., Sardina, S., van Beest, N.R.T.P.: Grace: A simulator for continuous goal recognition over changing environments. In: International IJCAI Workshop on Process Management in the AI era (PMAI@IJCAI). (2022).
35. Van Beest, N.R.T.P., Weber, I.: Behavioral classification of business process executions at runtime. In: BPM Workshops: International Workshop on Runtime Analysis of Process-Aware Information Systems (PRAISE), Springer (2016).
36. García-Bañuelos, L., Van Beest, N.R.T.P., Dumas, M., La Rosa, M.: Business process conformance checking based on event structures. In: Proc. of NWPT’2015, Reykjavik University (2015) 3 pages.
37. Van Beest, N.R.T.P., Kaldeli, E., Bulanov, P., Wortmann, J., Lazovik, A.: Automatic detection of business process interference. In: International Workshop on Knowledge-intensive Business Processes. (2012).

Demos

38. Groefsema, H., Van Beest, N.R.T.P., Armas-Cervantes, A.: Automated compliance verification of business processes in apromore. In: Proc. of BPM Demos 2017, CEUR. Volume 1920., Springer (2017).
39. Armas-Cervantes, A., Van Beest, N.R.T.P., La Rosa, M., Dumas, M., Raboczi, S.: Incremental and interactive business process model repair in apromore. In: Proc. of BPM Demos 2017, CEUR. Volume 1920., Springer (2017).
40. Armas-Cervantes, A., Van Beest, N.R.T.P., Dumas, M., García-Bañuelos, L., La Rosa, M.: Behavior-based process comparison in apromore. In: Proc. of BPM Demos 2016, CEUR. Volume 1789., Springer (2016).

Books

41. Van Beest, N.R.T.P.: Process interference: automated identification and repair. PhD thesis, University of Groningen (2013).

Invited talks

42. García-Bañuelos, L., Van Beest, N.R.T.P., Dumas, M., La Rosa, M., Mertens, W.: Complete and interpretable conformance checking of business processes. In: European Software Engineering Conference. (2017).