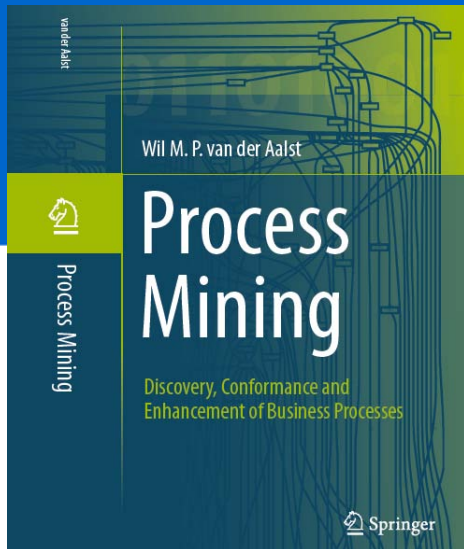


Process Mining

Discovery, Conformance and Enhancement of Business Processes

prof.dr.ir. Wil van der Aalst
www.processmining.org



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Where innovation starts



Wil M. P. van der Aalst
Process Mining

Discovery, Conformance and Enhancement of Business Processes

More and more information about business processes is recorded by information systems in the form of so-called "event logs". Despite the omnipresence of such data, most organizations diagnose problems based on fiction rather than facts. Process mining is an emerging discipline based on process model-driven approaches and data mining. It not only allows organizations to fully benefit from the information stored in their systems, but it can also be used to check the conformance of processes, detect bottlenecks, and predict execution problems.

Wil van der Aalst delivers the first book on process mining. It aims to be self-contained while covering the entire process mining spectrum from process discovery to operational support. In Part I, the author provides the basics of business process modeling and data mining necessary to understand the remainder of the book. Part II focuses on process discovery as the most important process mining task. Part III moves beyond discovering the control flow of processes and highlights conformance checking, and organizational and time perspectives. Part IV guides the reader in successfully applying process mining in practice, including an introduction to the widely used open-source tool ProM. Finally, Part V takes a step back, reflecting on the material presented and the key open challenges.

Overall, this book provides a comprehensive overview of the state of the art in process mining. It is intended for business process analysts, business consultants, process managers, graduate students, and BPM researchers.

Features and Benefits:

- First book on process mining, bridging the gap between business process modeling and business intelligence.
- Written by one of the most influential and most-cited computer scientists and the best-known BPM researcher.
- Self-contained and comprehensive overview for a broad audience in academia and industry.
- The reader can put process mining into practice immediately due to the applicability of the techniques and the availability of the open-source process mining software ProM.

Computer Science

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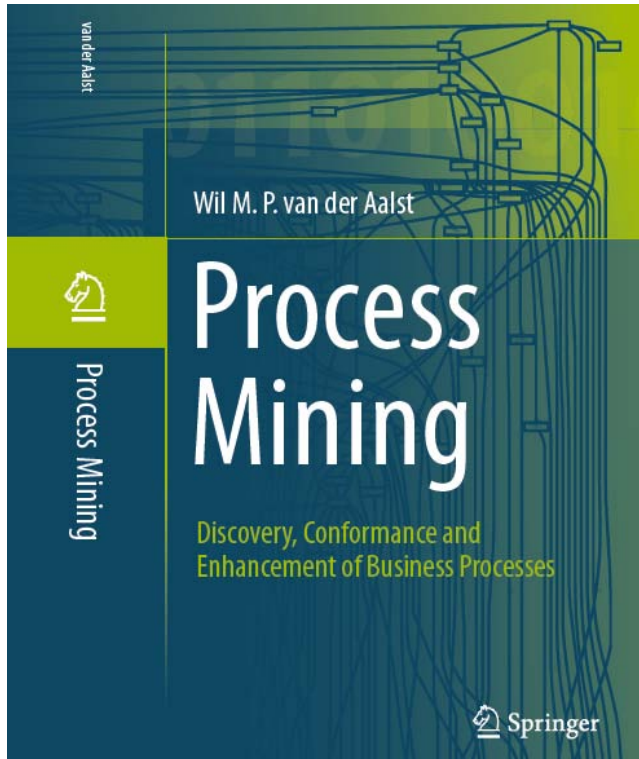
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- **Thanks to all organizations that provided data and supported our process mining research.**
- **Thanks to the following individuals:**

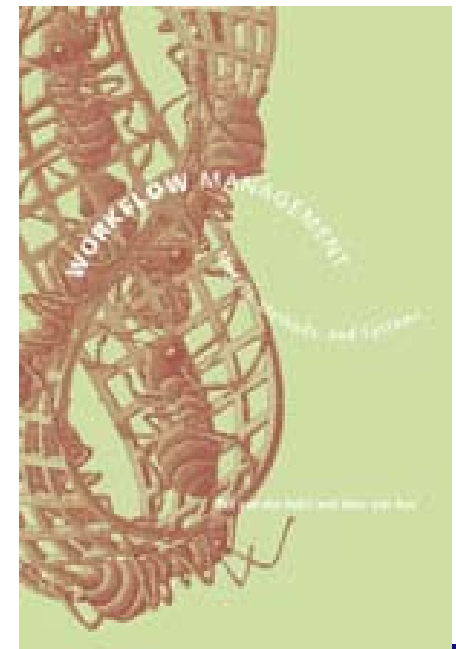
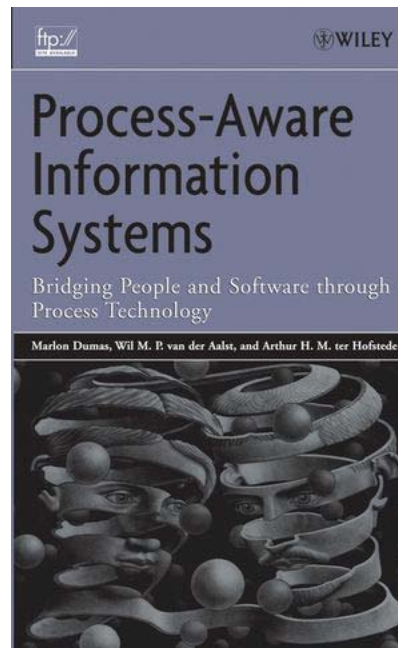
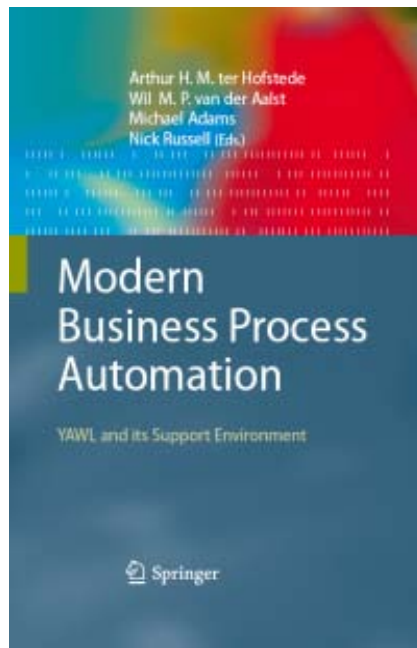
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More books

- **Modeling Business Processes: A Petri Net-Oriented Approach**

Wil van der Aalst and Christian Stahl

<http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=12548>



Pointers

The logo for ProM, featuring the word "ProM" in a white, sans-serif font on a dark blue rounded rectangular background.A red rectangular box containing the text "IEEE Task Force on Process Mining" in white, sans-serif font.

- ProM Software: prom.sourceforge.net
- Process mining: www.processmining.org
- ProM 5 series nightly builds: prom.win.tue.nl/tools/prom/nightly5/
- ProM 6 series nightly builds: prom.win.tue.nl/tools/prom/nightly/
- Converting logs (MXML-based) promimport.sourceforge.net
- XES: www.xes-standard.org and www.openxes.org
- Papers et al.: vdaalst.com
- IEEE Task Force on Process Mining: www.win.tue.nl/ieeetfpm/