

[Home](#) > [Machine Learning and Its Applications](#) > Chapter

# Data Mining in Economics, Finance, and Marketing

| Chapter | First Online: 01 January 2001

| pp 295–299 | [Cite this chapter](#)





## Machine Learning and Its Applications

(ACAI 1999)

[Hans C. Jessen](#) & [Georgios Paliouras](#)

 Part of the book series: [Lecture Notes in Computer Science](#) ((LNAI, volume 2049))



 Included in the following conference series:  
[Advanced Course on Artificial Intelligence](#)

 4691 Accesses  5 Citations

## Abstract

Data Mining has become a buzzword in industry in recent years. It is something that everyone is talking about but few seem to understand. There are two reasons for this lack of understanding: First is the fact that Data Mining researchers have very diverse backgrounds such as machine learning, psychology and statistics. This means that the research is often based on different methodologies and

communication links e.g. notation is often unique to a particular research area which hampers the exchange of ideas and the dissemination to the wider public. The second reason for the lack of understanding is that the main ideas behind Data Mining are often completely opposite to mainstream statistics and as many companies interested in Data Mining already employ statisticians, such a change of view can create opposition.

 This is a preview of subscription content, [log in via an institution](#)  to check access.

Access this chapter

Log in via an institution →

[Institutional subscriptions](#) →

Preview

Unable to display preview. [Download preview PDF.](#)

Similar content being viewed by others



**Data Mining in Accounting and Banking: Applications, Opportunities and Challenges**

Chapter | © 2023



**Dynamics of Data Mining Algorithms in Diversified Fields**

Chapter | © 2018



**Data Mining**

Chapter | © 2018

## Explore related subjects

Discover the latest articles, books and news in related subjects, suggested using machine learning.

[Data Mining and Knowledge Discovery](#)

[Data Science](#)

[Data Analytics](#)

[Data Mining](#)

[Statistical Finance](#)

[Statistics in Business, Management, Economics, Finance, Insurance](#)

## References

1. Adamidis, P, and Koukoulakis, K. Evolutionary Data Mining applied to TV Databases: A First Approach. In [15].

[Google Scholar](#)

2. Coenen, F., Swinnen, G., Vanhoof, K. and Wets, G. The Improvement of Response Modelling: Combining Rule-Induction and Case-Based Reasoning. In [15].

[Google Scholar](#)

3. Dikaiakos, M. FIGI: Using Mobile Agent Technology to Collect Financial Information on Internet. In [15].

[Google Scholar](#)

4. Feelders, A. and Daniels, H. Discovery in practice. In [15].

[Google Scholar](#)

5. Horizon Systems Laboratory. Mobile Agent Computing. A white paper. Mitsubishi Electric ITA., January 1998.

[Google Scholar](#)

6. Karamanlidou, M. Tuffier, O. and Vlahavas, I. Stock Miner: A System for

Knowledge Discovery in Financial Data. In [15].

[Google Scholar](#)

7. Krone, A. and Kiendl, H. Rule-based decision analysis with Fuzzy-ROSA method, *Proceedings of EFDAN'96*, Dortmund (Germany), 1996, 109-114.

[Google Scholar](#)

8. Kowalczyk, W., Piasta, Z. Rough-set inspired approach to knowledge discovery in business databases. In: X. Wu, R. Kotagiri, K. R. Korb, *Research and Development in Knowledge Discovery and Data Mining*, Proceedings of the Second Pacific-Asia Conference on Knowledge Discovery and Data Mining, PAKDD-98, Melbourne, 15-17 April, Springer-Verlag, Berlin, Heidelberg, New York, 1998, 186-197.

[Google Scholar](#)

9. MIT GmbH. *WINROSA: Handbook*, Aachen, Germany, 1997(b).

[Google Scholar](#)

- 10 Piasta, Z., Lenarcik, A. Learning rough classifiers from large databases with missing values. In: L. Polkowski, A. Skowron, (eds), *Rough Sets in Knowledge Discovery*, Physica Verlag, 1998, 483-499.

[Google Scholar](#)

11. Piasta, Z. Analyzing business databases with the ProbRough rule induction system. In [15].

[Google Scholar](#)

12. Quinlan, J.R., *C4.5: Programs for Machine Learning*, Morgan Kaufmann, 1993.

13. Nikolaos Thomaidis, George Dounias, Costas D. Zopounidis: A fuzzy rule based learning method for corporate bankruptcy prediction. In [15].

[Google Scholar](#)

14. Van den Poel, D., Piasta, Z. Purchase prediction in database marketing with the ProbRough system. In: L. Polkowski, A. Skowron, (eds), *Rough Sets and Current Trends in Computing*, Physica Verlag, 1998, 593–600.

[Google Scholar](#)

15. Proceedings of the Workshop on Data Mining in Economics, Finance and Marketing, Advanced Course on Artificial Intelligence (ACAI' 99), Chania, Greece, 1999 (<http://www.iit.demokritos.gr/skel/eetn/acai99/Workshops.htm>).

## Author information

---

### Authors and Affiliations

**Initiative Consulting, London, SW1V 1PX, UK**

Hans C. Jessen

**Inst. of Informatics and Telecommunications, NCSR “Demokritos”, 15310, Athens, Greece**

Georgios Paliouras

## Editor information

---

### Editors and Affiliations

**National Centre for Scientific Research “Demokritos”, Institute of Informatics and Telecommunications, P.O. Box 60228, Ag. Paraskevi, 15310, Athens, Greece**

## Rights and permissions

---

[Reprints and permissions](#)

## Copyright information

---

© 2001 Springer-Verlag Berlin Heidelberg

## About this chapter

---

### Cite this chapter

Jessen, H.C., Paliouras, G. (2001). Data Mining in Economics, Finance, and Marketing. In: Paliouras, G., Karkaletsis, V., Spyropoulos, C.D. (eds) Machine Learning and Its Applications. ACAI 1999. Lecture Notes in Computer Science(), vol 2049. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/3-540-44673-7\\_18](https://doi.org/10.1007/3-540-44673-7_18)

[.RIS↓](#) [.ENW↓](#) [.BIB↓](#)

DOI	Published	Publisher Name
<a href="https://doi.org/10.1007/3-540-44673-7_18">https://doi.org/10.1007/3-540-44673-7_18</a>	20 September 2001	Springer, Berlin, Heidelberg

Print ISBN	Online ISBN	eBook Packages
978-3-540-42490-1	978-3-540-44673-6	<a href="#">Springer Book Archive</a>

## Keywords

[Data Mining](#)

[Mobile Agent](#)

[Data Mining Problem](#)

[Data Mining Research](#)

[Mobile Agent Technology](#)

*These keywords were added by machine and not by the authors. This process is experimental and the keywords may be updated as the learning algorithm improves.*

## Publish with us

# Search

Search by keyword or author



## Navigation

Find a journal

Publish with us

Track your research