#### Jiawei Han and Micheline Kamber

# Data Mining: Concepts and Techniques, 2nd ed.

#### The Morgan Kaufmann Series in Data Management Systems, Jim Gray, Series Editor [Morgan Kaufmann Publishers](http://www.mkp.com/datamining2e), March 2006. ISBN 1-55860-901-6

“The second edition of Han and Kamber Data Mining: Concepts and Techniques updates and improves the already comprehensive coverage of the first edition and adds coverage of new and important topics, such as mining stream data, mining social networks, and mining spatial, multimedia, and other complex data. This book will be an excellent textbook for courses on Data Mining and Knowledge Discovery.”

-Gregory Piatetsky-Shapiro, President, [KDnuggets](http://www.kdnuggets.com/)

“The second edition is the most complete and up-to-date presentation on this topic. Compared to the already comprehensive and thorough coverage of the first edition, it adds the state-of-the-art research results in new topics such as mining stream, time-series and sequence data as well as mining spatial, multimedia, text and Web data. This book is a must-have for all instructors, researchers, developers and users in the area of data mining and knowledge discovery.”

- Hans-Peter Kriegel, University of Munich, Germany

**http://web.engr.illinois.edu/~hanj/bk2/slidesindex.htm**

**Slides in PowerPoint form**

[Chapter 1. Introduction](http://web.engr.illinois.edu/~hanj/bk2/01.ppt)

[Chapter 2. Data Preprocessing](http://web.engr.illinois.edu/~hanj/bk2/02.ppt)

[Chapter 3. Data Warehouse and OLAP Technology: An Overview](http://web.engr.illinois.edu/~hanj/bk2/03.ppt)

[Chapter 4. Data Cube Computation and Data Generalization](http://web.engr.illinois.edu/~hanj/bk2/04.ppt)

[Chapter 5. Mining Frequent Patterns, Associations and Correlations](http://web.engr.illinois.edu/~hanj/bk2/05.ppt)

[Chapter 6. Classification and Prediction](http://web.engr.illinois.edu/~hanj/bk2/06.ppt)

[Chapter 7. Cluster Analysis](http://web.engr.illinois.edu/~hanj/bk2/07.ppt)

Chapter 8. Mining Stream, Time-Series and Sequence Data

[Section 8.1. Mining Data Streams](http://web.engr.illinois.edu/~hanj/bk2/081.ppt)

[Section 8.2. Mining Time-Series Data](http://web.engr.illinois.edu/~hanj/bk2/082.ppt)

[Section 8.3. Mining Sequence Patterns in Transactional Databases](http://web.engr.illinois.edu/~hanj/bk2/083.ppt)

[Section 8.4. Mining Sequence Patterns in Biological Databases](http://web.engr.illinois.edu/~hanj/bk2/084.ppt)

Chapter 9. Graph Mining, Social Network Analysis and Multi-Relational Data Mining

[Section 9.1. Graph Mining](http://web.engr.illinois.edu/~hanj/bk2/091.ppt)

[Section 9.2. Social Network Analysis](http://web.engr.illinois.edu/~hanj/bk2/092.ppt)

[Section 9.3. Multirelational Data Mining](http://web.engr.illinois.edu/~hanj/bk2/093.ppt)

Chapter 10. Mining Object, Spatial, Multimedia, Text and Web Data

[Section 10.1. Mining Object, Spatial and Multimedia Data](http://web.engr.illinois.edu/~hanj/bk2/101.ppt)

[Section 10.1. Mining Text and Web Data](http://web.engr.illinois.edu/~hanj/bk2/102.ppt)

[Chapter 11. Applications and Trends in Data Mining](http://web.engr.illinois.edu/~hanj/bk2/11.ppt)

[Additional theme: Visual Data Mining](http://web.engr.illinois.edu/~hanj/bk2/a1VisualMine.ppt)

[Additional theme: Software Bug Mining](http://web.engr.illinois.edu/~hanj/bk2/a2SoftMine.ppt)

[Additional theme: RFID Data Warehousing and High-Performance Data Mining](http://web.engr.illinois.edu/~hanj/bk2/a5rfid_hpdm.ppt)

[Additional theme: Intrusion Detection and Data Mining](http://web.engr.illinois.edu/~hanj/bk2/a3Intrusion.ppt)

[Additional theme: Collaborative Filtering and Data Mining](http://web.engr.illinois.edu/~hanj/bk2/a4CollabF.ppt)

**Updated Slides for CS, UIUC Teaching in PowerPoint form**

(Note: This set of slides corresponds to the current teaching of the data mining course at CS, UIUC. In general, it takes new technical materials from recent research papers but shrinks some materials of the textbook. It has also rearranged the order of presentation for some technical materials. This new set of slides corresponds more closely to the coming 3rd edition of the book, whose first volume will be published sometime in 2011.)

Instructions on finding the new sets of slides are as follows:

1.     Go to the homepage of the first author, Prof. Jiawei Han: [http://web.engr/illinois.edu/~hanj/](http://web.engr.illinois.edu/~hanj/)

2.     Click the following links in the section of Teaching:

a.    UIUC CS412: An Introduction to Data Warehousing and Data Mining

b.    UIUC CS512: Data Mining: Principles and Algorithms

3.     Download the slides of the corresponding chapters you are interested in