APPENDIX A

This summary of some recognized journals, conferences, blog sites, data-mining tools, and data sets is being provided to help readers to communicate with other users of data-mining technology, and to receive information about trends and new applications in the field. It could be especially useful for students who are starting to work in data mining and trying to find appropriate information or solve current class-oriented tasks. This list is not intended to endorse any specific Web site, and the reader has to be aware that this is only a small sample of possible resources on the Internet.

A.1 DATA-MINING JOURNALS

1. Data Mining and Knowledge Discovery (DMKD)

http://www.kluweronline.com/issn/1384-5810/

DMKD is a premier technical publication in the Knowledge Discovery and Data Mining (KDD) field, providing a resource collecting common relevant methods and techniques and a forum for unifying the diverse constituent research communities. The journal publishes original technical papers in both the research and practice of data mining and knowledge discovery surveys and tutorials of important areas and techniques, and detailed descriptions of significant applications. The scope of *DMKD* includes (1) *theory and foundational issues including* data and knowledge representation, uncertainty management, algorithmic complexity, and statistics over massive data sets; (2) *data mining methods* such as classification, clustering, probabilistic modeling, prediction and estimation, dependency analysis, search, and optimization; (3) a*lgorithms* for spatial, textual, and multimedia data mining, scalability to large databases, parallel and distributed data-mining techniques, and automated discovery agents; (4) *knowledge discovery proc*ess including data preprocessing, evaluating, consolidating, and explaining discovered knowledge, data and knowledge visualization, and interactive data exploration and discovery; and (5) *application issues* such as application case studies, data-mining systems and tools, details of successes and failures of KDD, resource/knowledge discovery on the Web, and privacy and security.

Data Mining: Concepts, Models, Methods, and Algorithms, Second Edition. Mehmed Kantardzic.

2. IEEE Transactions on Knowledge and Data Engineering (TKDE)

http://www.computer.org/tkde/

The *IEEE TKDE* is an archival journal published monthly. The information published in this journal is designed to inform researchers, developers, managers, strategic planners, users, and others interested in state-of-the-art and state-of-the-practice activities in the knowledge and data-engineering area. We are interested in well-defined theoretical results and empirical studies that have potential impact on the acquisition, management, storage, and graceful degeneration of knowledge and data, as well as in provision of knowledge and data services. Specific topics include, but are not limited to, (1) artificial intelligence (AI) techniques, including speech, voice, graphics, images, and documents; (2) knowledge and data-engineering tools and techniques; (3) parallel and distributed processing; (4) real-time distributed; (5) system architectures, integration, and modeling; (6) database design, modeling, and management; (7) query design and implementation languages; (8) distributed database control; (9) algorithms for data and knowledge management; (10) performance evaluation of algorithms and systems; (11) data-communications aspects; (12) system applications and experience; (13) knowledge-based and expert systems; and (14) integrity, security, and fault tolerance.

3. Knowledge and Information Systems (KAIS)

http://www.cs.uvm.edu/~kais/

KAIS is a peer-reviewed archival journal published by Springer. It provides an international forum for researchers and professionals to share their knowledge and report new advances on all topics related to knowledge systems and advanced information systems. The journal focuses on knowledge systems and advanced information systems, including their theoretical foundations, infrastructure, enabling technologies, and emerging applications. In addition to archival papers, the journal also publishes significant ongoing research in the form of short papers and very short papers on "visions and directions."

4. IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)

http://computer.org/tpami/

IEEE TPAMI is a scholarly archival journal published monthly. Its editorial board strives to present most important research results in areas within *TPAMI*'s scope. This includes all traditional areas of computer vision and image understanding, all traditional areas of pattern analysis and recognition, and selected areas of machine intelligence. Areas such as machine learning, search techniques, document and handwriting analysis, medical-image analysis, video and image sequence analysis, content-based retrieval of image and video, face and gesture recognition, and relevant specialized hardware and/or software architectures are also covered.

5. Machine Learning

http://www.kluweronline.com/issn/0885-6125/

Machine Learning is an international forum for research on computational approaches to learning. The journal publishes articles reporting substantive results on

a wide range of learning methods applied to a variety of learning problems. It features papers that describe research on problems and methods, applications research, and issues of research methodology as well as papers making claims about learning problems or methods provide solid support via empirical studies, theoretical analysis, or comparison to psychological phenomena. Application papers show the process of applying learning methods to solve important applications problems. Research methodology papers improve how machine-learning research is conducted. All papers describe the supporting evidence in ways that can be verified or replicated by other researchers. The papers also detail the learning component clearly and discuss assumptions regarding knowledge representation and the performance task.

6. Journal of Machine Learning Research (JMLR)

http://jmlr.csail.mit.edu

The *JMLR* provides an international forum for the electronic and paper publication of high-quality scholarly articles in all areas of machine learning. All published papers are freely available online. JMLR has a commitment to rigorous yet rapid reviewing. JMLR provides a venue for papers on machine learning featuring new algorithms with empirical, theoretical, psychological, or biological justification; experimental and/or theoretical studies yielding new insights into the design and behavior of learning in intelligent systems; accounts of applications of existing techniques that shed light on the strengths and weaknesses of the methods; formalization of new learning tasks (e.g., in the context of new applications) and of methods for assessing performance on those tasks; development of new analytical frameworks that advance theoretical studies of practical-learning methods; computational models of data from natural learning systems at the behavioral or neural level; or extremely well-written surveys of existing work.

7. ACM Transactions on Knowledge Discovery from Data (TKDD)

http://tkdd.cs.uiuc.edu/index.html

The *ACM TKDD* addresses a full range of research in the knowledge discovery and analysis of diverse forms of data. Such subjects include scalable and effective algorithms for data mining and data warehousing, mining data streams, mining multimedia data, mining high-dimensional data, mining text, Web, and semi-structured data, mining spatial and temporal data, data mining for community generation, social-network analysis, and graph structured data, security and privacy issues in data mining, visual, interactive and online data mining, preprocessing and postprocessing for data mining, robust and scalable statistical methods, data-mining languages, foundations of data mining, KDD framework and process, and novel applications and infrastructures exploiting data-mining technology.

8. Journal of Intelligent Information Systems (JIIS)

http://www.springerlink.com/content/0925-9902

The *JIIS: Integrating Artificial Intelligence and Database Technologies* fosters and presents research and development results focused on the integration of AI and database

technologies to create next generation information systems—intelligent information systems. *JIIS* provides a forum wherein academics, researchers, and practitioners may publish high-quality, original and state-of-the-art papers describing theoretical aspects, systems architectures, analysis and design tools and techniques, and implementation experiences in intelligent information systems. Articles published in *JIIS* include research papers, invited papers, meeting, workshop and conference announcements and reports, survey and tutorial articles, and book reviews. Topics include foundations and principles of data, information, and knowledge models; and methodologies for IIS analysis, design, implementation, validation, maintenance and evolution.

9. Statistical Analysis and Data Mining

http://www.amstat.org/publications/sadm.cfm

The *Statistical Analysis and Data Mining* addresses the broad area of data analysis, including data-mining algorithms, statistical approaches, and practical applications. Topics include problems involving massive and complex data sets, solutions using innovative data-mining algorithms and/or novel statistical approaches, and the objective evaluation of analyses and solutions. Of special interest are articles that describe analytical techniques and discuss their application to real problems in such a way that they are accessible and beneficial to domain experts across science, engineering, and commerce.

10. Intelligent Data Analysis

http://www.iospress.nl/html/1088467x.php

Intelligent Data Analysis provides a forum for the examination of issues related to the research and applications of AI techniques in data analysis across a variety of disciplines. These techniques include (but are not limited to) all areas of data visualization, data preprocessing (fusion, editing, transformation, filtering, sampling), data engineering, database mining techniques, tools and applications, use of domain knowledge in data analysis, evolutionary algorithms, machine learning, neural nets, fuzzy logic, statistical pattern recognition, knowledge filtering, and postprocessing. In particular, we prefer papers that discuss development of new AI-related data analysis architectures, methodologies, and techniques and their applications to various domains. Papers published in this journal are geared heavily toward applications, with an anticipated split of 70% of the papers published being application-oriented research, and the remaining 30% containing more theoretical research.

A.2 DATA-MINING CONFERENCES

1. SIAM International Conference on Data Mining, SDM

http://www.siam.org/meetings/

This conference provides a venue for researchers who are addressing extracting knowledge from large datasets that requires the use of sophisticated, high-performance

and principled analysis techniques and algorithms, based on sound theoretical and statistical foundations. It also provides an ideal setting for graduate students and others new to the field to learn about cutting-edge research by hearing outstanding invited speakers and attending presentations and tutorials (included with conference registration). A set of focused workshops are also held in the conference. The proceedings of the conference are published in archival form, and are also made available on the *SIAM* Web site.

2. The ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)

http://sigkdd.org/conferences.php

The annual ACM SIGKDD conference is the premier international forum for data-mining researchers and practitioners from academia, industry, and government to share their ideas, research results, and experiences. It features keynote presentations, oral paper presentations, poster sessions, workshops, tutorials, panels, exhibits, and demonstrations. Authors can submit their original work either to SIGKDD Research track or SIGKDD Industry/Government track. The research track accepts papers on all aspects of knowledge discovery and data mining overlapping with topics from machine learning, statistics, databases, and pattern recognition. Papers are expected to describe innovative ideas and solutions that are rigorously evaluated and well presented. The Industrial/Government track highlights challenges, lessons, concerns, and research issues arising out of deploying applications of KDD technology. The focus is on promoting the exchange of ideas between researchers and practitioners of data mining.

3. IEEE International Conference on Data Mining (ICDM)

http://www.cs.uvm.edu/~icdm/

The *IEEE ICDM* has established itself as the world's premier research conference in data mining. The conference provides a leading forum for presentation of original research results, as well as exchange and dissemination of innovative, practical development experiences. The conference covers all aspects of data mining, including algorithms, software and systems, and applications. In addition, ICDM draws researchers and application developers from a wide range of data mining-related areas such as statistics, machine learning, pattern recognition, databases and data warehousing, data visualization, knowledge-based systems, and high-performance computing. By promoting novel, high-quality research findings, and innovative solutions to challenging data-mining problems, the conference seeks to continuously advance the state-of-the-art in data mining. Besides the technical program, the conference will feature workshops, tutorials, panels, and the *ICDM* data-mining contest.

4. International Conference on Machine Learning and Applications (ICMLA)

http://www.icmla-conference.org/

The aim of the conference is to bring researchers working in the areas of machine learning and applications together. The conference will cover both theoretical and

experimental research results. Submission of machine-learning papers describing machine-learning applications in fields like medicine, biology, industry, manufacturing, security, education, virtual environments, game playing, and problem solving is strongly encouraged.

5. The World Congress in Computer Science Computer Engineering and Applied Computing (WORLDCOMP)

http://www.world-academy-of-science.org/

WORLDCOMP is the largest annual gathering of researchers in computer science, computer engineering, and applied computing. It assembles a spectrum of affiliated research conferences, workshops, and symposiums into a coordinated research meeting held in a common place at a common time. This model facilitates communication among researchers in different fields of computer science and computer engineering. The WORLDCOMP is composed of more than 20 major conferences. Each conference will have its own proceedings. All conference proceedings/books are considered for inclusion in major database indexes that are designed to provide easy access to the current literature of the sciences (database examples are DBLP, ISI Thomson Scientific, IEE INSPEC).

6. IADIS European Conference on Data Mining (ECDM)

http://www.datamining-conf.org/

The *ECDM* is aimed to gather researchers and application developers from a wide range of data mining-related areas such as statistics, computational intelligence, pattern recognition, databases, and visualization. *ECDM* aims to advance the state-of-the-art in the data-mining field and its various real-world applications. *ECDM* will provide opportunities for technical collaboration among data mining and machine-learning researchers around the globe.

7. Neural Information Processing Systems Conference (NIPS)

http://nips.cc/

The NIPS Foundation is a nonprofit corporation whose purpose is to foster the exchange of research on neural information-processing systems in their biological, technological, mathematical, and theoretical aspects. Neural information processing is a field that benefits from a combined view of biological, physical, mathematical, and computational sciences.

The primary focus of the NIPS Foundation is the presentation of a continuing series of professional meetings known as the Neural Information Processing Systems Conference, held over the years at various locations in the United States and Canada.

The NIPS Conference features a single-track program, with contributions from a large number of intellectual communities. Presentation topics include algorithms and architectures; applications; brain imaging; cognitive science and AI; control and

reinforcement learning; emerging technologies; learning theory; neuroscience; speech and signal processing; and visual processing.

8. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD)

http://www.ecmlpkdd.org/

The *ECML PKDD* is one of the leading academic conferences on machine learning and knowledge discovery, held in Europe every year.

ECML PKDD is a merger of two European conferences, ECML and PKDD. In 2008 the conferences were merged into one conference, and the division into traditional ECML topics and traditional PKDD topics was removed.

9. Association for the Advancement of Artificial Intelligence (AAAI) Conference

http://www.aaai.org/

Founded in 1979, the AAAI, formerly the American Association for Artificial Intelligence, is a nonprofit scientific society devoted to advancing the scientific understanding of the mechanisms underlying thought and intelligent behavior and their embodiment in machines. AAAI also aims to increase public understanding of AI, improve the teaching and training of AI practitioners, and provide guidance for research planners and funders concerning the importance and potential of current AI developments and future directions.

Major AAAI activities include organizing and sponsoring conferences, symposia, and workshops, publishing a quarterly magazine for all members, publishing books, proceedings, and reports, and awarding grants, scholarships, and other honors. The purpose of the AAAI conference is to promote research in AI and scientific exchange among AI researchers, practitioners, scientists, and engineers in related disciplines.

10. International Conference on Very Large Data Base (VLDB)

http://www.vldb.org/

VLDB Endowment Inc. is a nonprofit organization incorporated in the United States for the sole purpose of promoting and exchanging scholarly work in databases and related fields throughout the world. Since 1992, the Endowment has started to publish a quarterly journal, the VLDB Journal, for disseminating archival research results, which has become one of the most successful journals in the database area. The VLDB Journal is published in collaboration with Springer-Verlag. On various activities, the Endowment closely cooperates with ACM SIGMOD.

VLDB conference is a premier annual international forum for data management and database researchers, vendors, practitioners, application developers, and users. The conference features research talks, tutorials, demonstrations, and workshops. It covers current issues in data management, database and information systems research. Data management and databases remain among the main technological cornerstones of emerging applications of the twenty-first century.

A.3 DATA-MINING FORUMS/BLOGS

1. KDnuggets Forums

http://www.kdnuggets.com/phpBB/index.php
Good resource for sharing experience and asking questions.

2. Data Mining

http://dataminingwarehousing.blogspot.com/
This blog is helpful for data-mining beginners. It presents basic data-mining concepts with examples and applications.

3. Data Mining and Predictive Analytics

http://abbottanalytics.blogspot.com/
The posts on this blog cover topics related to data mining and predictive analytics from the perspectives of both research and industry.

4. AI, Data Mining, Machine Learning, and Other things

http://blog.markus-breitenbach.com/
This blog discusses machine learning with emphasis on AI and statistics.

5. Geeking with Greg

http://glinden.blogspot.com
This blog focuses on the topic of personalization and related research.

6. Data Miners Blog

http://blog.data-miners.com/
The posts on this blog provide industry-oriented reflections on topics from data analysis and visualization.

7. Data-Mining Research

http://www.dataminingblog.com/
This blog provides a venue for exchanging ideas and comments about data-mining techniques and applications.

8. Data Wrangling

http://www.datawrangling.com/
This blog provides across the board posts on news and technology related to machine learning and data mining.

9. Intelligent Machines

http://www.damienfrancois.be/blog/

This blog is dedicated to artificial intelligence and machine learning, and focuses on applications in business, science and every-day life.

10. Mininglabs

http://www.mininglabs.com/

This blog is established by a group of French independent researchers in the field of data mining, analyzing and data visualization. They are mostly interested in analyzing data coming from the internet at large (Web, peer-to-peer networks).

11. Machine Learning (Theory)

http://hunch.net/

A blog dedicated to the various aspects of machine learning theory and applications.

A.4 DATA SETS

This section describes a number of freely available data sets ready for use in data-mining algorithms. We selected a few examples for students who are starting to learn data mining and they would like to practice traditional data-mining tasks. A majority of these data sets are hosted on the UCI Machine Learning Repository. For more data sets look up this repository at http://archive.ics.uci.edu/ml/index.html.

A.4.1 Classification

Iris Data Set. http://archive.ics.uci.edu/ml/datasets/Iris

The Iris Data Set is a small data set often used in machine learning and data mining. It includes 150 data points each representing three different kinds of iris. The task is to learn to classify iris based on four measurements. This data set was used by R. A. Fisher in 1936 as an example for discriminant analysis.

Adult Data Set. http://archive.ics.uci.edu/ml/datasets/Adult

The Adult Data Set contains 48,842 samples extracted from the U.S. Census. The task is to classify individuals as having an income that does or does not exceed $50,000/year based on factors such as age, education, race, sex, and native country.

Breast Cancer Wisconsin (Diagnostic) Data Set. http://archive.ics.uci.edu/ml/datasets/Breast+Cancer+Wisconsin+%28Diagnostic%29

This data set consists of a number of measurements taken over a "digitized image of a fine needle aspirate (FNA) of a breast mass." There are 569 samples. The task is to classify each data point as benign or malignant.

A.4.2 Clustering

Bag of Words Data Set. http://archive.ics.uci.edu/ml/datasets/Bag+of+Words

Word counts have been extracted from five document sources: Enron Emails, NIPS full papers, KOS blog entries, NYTimes news articles and Pubmed abstracts. The task is to cluster the documents used in this data set based on the word counts found. One may compare the output clusters with the sources from which each document came.

US Census Data (1990) Data Set. http://archive.ics.uci.edu/ml/datasets/US+Census+Data+%281990%29

This data set is a one percent sample from the 1990 Public Use Microdata Samples (PUMS). It contains 2,458,285 records and 68 attributes.

A.4.3 Regression

Auto MPG Data Set. http://archive.ics.uci.edu/ml/datasets/Auto+MPG

This data set provides a number of attributes of cars that can be used to attempt to predict the "city-cycle fuel consumption in miles per gallon." There are 398 data points and eight attributes.

Computer Hardware Data Set. http://archive.ics.uci.edu/ml/datasets/Computer+Hardware

This data set provides a number of CPU attributes that can be used to predict relative CPU performance. It contains 209 data points and 10 attributes.

A.4.4 Web Mining

Anonymous Microsoft Web Data. http://archive.ics.uci.edu/ml/datasets/Anonymous+Microsoft+Web+Data

This data set contains page visits for a number of anonymous users who visited www.microsoft.com. The task is to predict future categories of pages a user will visit based on the Web pages previously visited.

KDD Cup 2000. http://www.sigkdd.org

This Web site contains five tasks used in a data-mining competition run yearly called KDD Cup. KDD Cup 2000 uses clickstream and purchase data obtained from Gazelle.com. Gazelle.com sold *legwear* and *legcare* products and closed their online store that same year. This Web site provides links to papers and posters of the winners of the various tasks and outlines their effective methods. Additionally, the description of the tasks provides great insight into original approaches to using data mining with clickstream data.

A.4.5 Text Mining

Reuters-21578 Text Categorization Collection. http://kdd.ics.uci.edu/databases/reuters21578/reuters21578.html

This is a collection of news articles that appeared on Reuters newswire in 1987. All of the news articles have been categorized. The categorization provides opportunities to test text classification or clustering methodologies.

20 Newsgroups. http://people.csail.mit.edu/jrennie/20Newsgroups/

The 20 Newsgroups data set contains 20,000 newsgroup documents. These documents are divided nearly evenly among 20 different newsgroups. Similar to the Reuters collection, this data set provides opportunities for text classification and clustering.

A.4.6 Time Series

Dodgers Loop Sensor Data Set. http://archive.ics.uci.edu/ml/datasets/Dodgers+Loop+Sensor

This data set provides the number of cars counted by a sensor every 5 min over 25 weeks. The sensor was for the Glendale on ramp for the 101 North Freeway in Los Angeles. The goal of this data was to "predict the presence of a baseball game at Dodgers stadium."

Australia Gun Deaths. http://robjhyndman.com/TSDL/crime.html

These data give the yearly death rates in Australia for gun-related and non-gun-related homicides and suicides for the years 1915–2004.

A.4.7 Data for Association Rule Mining

BMS-POS. http://www.sigkdd.org/kddcup

This data set gives the category for each product purchased from a large electronics retailer. It covers several years worth of point of sales data. This data set contains 515,597 transactions and 1,657 distinct items.

BMS-WebView1. http://www.sigkdd.org/kddcup

This data set contains several months of clickstream sessions for Gazelle.com. A transaction is defined in this data set as the detail pages viewed per session. This data set contains 59,602 transactions and 497 distinct items.

A.5 COMERCIALLY AND PUBLICLY AVAILABLE TOOLS

This summary of some publicly available commercial data-mining products is being provided to help readers better understand what software tools can be found on the market and what their features are. It is not intended to endorse or critique any specific product. Potential users will need to decide for themselves the suitability of each product for their specific applications and data-mining environments. This is primarily intended as a starting point from which users can obtain more information. There is a constant stream of new products appearing in the market and hence this list is by no means comprehensive. Because these changes are very frequent, the author suggests

two Web sites for information about the latest tools and their performances: http://www.kdnuggets.com *and* http://www.knowledgestorm.com.

A.5.1 Free Software

DataLab

- Publisher: Epina Software Labs (www.lohninger.com/datalab/en_home.html)
- DataLab, a complete and powerful data mining tool with a unique data exploration process, with a focus on marketing and interoperability with SAS. There is a public version for students.

DBMiner

- Publisher: Simon Fraser University (http://ddm.cs.sfu.ca)
- DBMiner is a publicly available tool for data mining. It is a multiple-strategy tool and it supports methodologies such as clustering, association rules, summarization, and visualization. DBMiner uses Microsoft SQL Server 7.0 Plato and runs on different Windows platforms.

GenIQ Model

- Publisher: DM STAT-1 Consulting (www.geniqmodel.com)
- GenIQ Model uses machine learning for regression tasks; automatically performs variable selection, and new variable construction, and then specifies the model equation to "optimize the decile table."

NETMAP

- Publisher: http://sourceforge.net/projects/netmap
- NETMAP is a general-purpose, information-visualization tool. It is most effective for large, qualitative, text-based data sets. It runs on Unix workstations.

RapidMiner

- Publisher: Rapid-I (http://rapid-i.com)
- Rapid-I provides software, solutions, and services in the fields of predictive analytics, data mining, and text mining. The company concentrates on automatic intelligent analyses on a large-scale base, that is, for large amounts of structured data-like database systems and unstructured data-like texts. The open-source data-mining specialist Rapid-I enables other companies to use leading-edge technologies for data mining and business intelligence. The discovery and leverage of unused business intelligence from existing data enables better informed decisions and allows for process optimization.

SIPNA

- Publisher: http://eric.univ-lyon2.fr/~ricco/sipina.html
- Sipina-W is publicly available software that includes different traditional data-mining techniques such as CART, Elisee, ID3, C4.5, and some new methods for generating decision trees.

SNNS

- Publisher: University of Stuttart (http://www.nada.kth.se/~orre/snns-manual/)
- SNNS is a publicly available software. It is a simulation environment for research on and application of artificial neural networks. The environment is available on Unix and Windows platforms.

TiMBL

- Publisher: Tilburg University (http://ilk.uvt.nl/timbl/)
- TiMBL is a publicly available software. It includes several memory-based learning techniques for discrete data. A representation of the training set is explicitly stored in memory, and new cases are classified by extrapolation from the most similar cases.

TOOLDIAG

- Publisher: http://sites.google.com/site/tooldiag/Home
- TOOLDIAG is a publicly available tool for data mining. It consists of several programs in C for statistical pattern recognition of multivariate numeric data. The tool is primary oriented toward classification problems.

Weka

- Publisher: University of Waikato (http://www.cs.waikato.ac.nz/ml/weka/)
- Weka is a software environment that integrates several machine-learning tools within a common framework and a uniform GUI. Classification and summarization are the main data-mining tasks supported by the Weka system.

Web Utilization Miner WUM

- Publisher: http://hypknowsys.sourceforge.net/
- WUM 6.0 is a publicly available integrated environment for Web-log preparation, querying, and visualization of summarized activities on a Web site.

A.5.2 Commercial Software WITH Trial Version

Alice d'Isoft

- Vendor: Isoft (www.alice-soft.com)
- ISoft provides a complete range of tools and services dedicated to analytical CRM, behavioral analysis, data modeling and analysis, Data Mining and Data Morphing.

ANGOSS' suite

- Vendor: Angoss Software Corp. (www.angoss.com)
- ANGOSS'suite consists of KnowledgeSTUDIO® and KnowledgeSEEKER®. KnowledgeSTUDIO® is an advanced data-mining and predictive analytics suite for all phases of the model development and deployment cycle—profiling, exploration, modeling, implementation, scoring, validation, monitoring and building scorecards—all in a high-performance visual environment. KnowledgeSTUDIO is widely used by marketing, sales, and risk analysts providing business users and expert analysts alike with a powerful, scalable, and complete data-mining solution. KnowledgeSEEKER® is a single-strategy desktop or client/server tool relying on a tree-based methodology for data mining. It provides a nice GUI for model building and letting the user explore data. It also allows users to export the discovered data model as text, SQL query, or Prolog program. It runs on Windows and Unix platforms, and accepts data from a variety of sources.

Autoclass III

- Vendor: www.openchannelsoftware.com/projects/AUTOCLASS_III/
- Autoclass III is an unsupervised Bayesian classification system for independent data. It seeks a maximum posterior probability to provide a simple approach to problems such as classification, clustering, and general mixture separation. It works on Unix platforms.

BayesiaLab

- Vendor: Bayesia (www.bayesia.com)
- BayesiaLab is a complete and powerful data-mining tool based on Bayesian networks, including data preparation, missing values imputation, data and variables clustering, and unsupervised and supervised learning.

Data Applied

- Vendor: Data Applied (http://data-applied.com)
- Data Applied, offers a comprehensive suite of web-based data mining techniques, an XML web API, and rich data visualizations.

DataEngine

- Vendor: MIT GmbH (www.dataengine.de)
- DataEngine is a multiple-strategy data-mining tool for data modeling, combining conventional data-analysis methods with fuzzy technology, neural networks, and advanced statistical techniques. It works on the Windows platform.

Evolver™

- Vendor: Palisade Corp. (www.palisade.com)
- Evolver is a single-strategy tool. It uses genetic-algorithm technology to solve complex optimization problems. This tool runs on all Windows platforms and it is based on data stored in Microsoft Excel tables.

GhostMiner System

- Vendor: FQS Poland (www.fqs.pl)
- GhostMiner, complete data mining suite, including k-nearest neighbors, neural nets, decision tree, neurofuzzy, SVM, PCA, clustering, and visualization.

KXEN Analytic

- Vendor: KXEN Inc. (www.kxen.com)
- KXEN (Knowledge eXtraction ENgines), providing Vapnik SVM (Support Vector Machines) tools, including data preparation, segmentation, time series, and SVM classifiers.

NeuroSolutions

- Vendor: NeuroDimension Inc. (www.neurosolutions.com)
- NeuroSolutions combines a modular, icon-based network design interface with an implementation of advanced learning procedures, such as recurrent backpropagation and backpropagation through time, and it solves data-mining problems such as classification, prediction, and function approximation. Some other notable features include C++ source code generation, customized components through DLLs, a comprehensive macro language, and Visual Basic accessibility through OLE Automation. The tool runs on all Windows platforms.

Oracle Data Mining

- Vendor: Oracle (www.oracle.com)
- Oracle Data Mining (ODM)—an option to Oracle Database 11 g Enterprise Edition—enables customers to produce actionable predictive information and build integrated business intelligence applications. Using data-mining functionality embedded in Oracle Database 11 g, customers can find patterns and insights

hidden in their data. Application developers can quickly automate the discovery and distribution of new business intelligence—predictions, patterns and discoveries—throughout their organization.

Optimus RP

- Vendor: Golden Helix Inc. (www.goldenhelix.com)
- Optimus RP, uses Formal Inference-based Recursive Modeling (recursive partitioning based on dynamic programming) to find complex relationships in data and to build highly accurate predictive and segmentation models.

Partek Software

- Vendor: Partek Inc. (www.partek.com)
- Partek Software is a multiple-strategy data-mining product. It is based on several methodologies including statistical techniques, neural networks, fuzzy logic, genetic algorithms, and data visualization. It runs on UNIX platforms.

Rialto™

- Vendor: Exeura (www.exeura.com)
- Exeura Rialto™ provides comprehensive support for the entire data mining and analytics lifecycle at an affordable price in a single, easy-to-use tool.

Salford Predictive Miner

- Vendor: Salford Systems (http://salford-systems.com)
- Salford Predictive Miner (SPM) includes CART®, MARS, TreeNet, and RandomForests, and powerful new automation and modeling capabilities. CART® is a robust, easy-to-use decision tree that automatically sifts large, complex databases, searching for and isolating significant patterns and relationships. Multivariate Adaptive Regression Splines (MARS) focuses on the development and deployment of accurate and easy-to-understand regression models. TreeNet demonstrates remarkable performance for both regression and classification and can work with varying sizes of data sets, from small to huge, while readily managing a large number of columns. RandomForests is best suited for the analysis of complex data structures embedded in small to moderate data sets containing typically less than 10,000 rows but allowing for more than 1 million columns. RandomForests has therefore been enthusiastically endorsed by many biomedical and pharmaceutical researchers.

STATISTICA Data Miner

- Vendor: Statsoft (www.statsoft.com)
- STATISTICA Data Miner contains the most comprehensive selection of data-mining methods available on the market, for example, by far the most

comprehensive selection of clustering techniques, neural networks architectures, classification/regression trees (also called recursive partitioning methods), multivariate modeling (including MARSplines, Support Vector Machines), association and sequence analysis (an optional add-on), and many other predictive techniques, even methods for advanced/true simulation and optimization of models are provided. It also provides the largest selection of graphics and visualization procedures of any competing products, to enable effective data exploration and visual data mining.

Synapse

- Vendor: Peltarion (www.peltarion.com)
- Synapse, a development environment for neural networks and other adaptive systems, supporting the entire development cycle from data import and preprocessing via model construction and training to evaluation and deployment; allows deployment as. NET components.

SOMine

- Vendor: Viscovery (www.viscovery.net)
- This single-strategy data-mining tool is based on self-organizing maps and is uniquely capable of visualizing multidimensional data. SOMine supports clustering, classification, and visualization processes. It works on all Windows platforms.

TIBCO Spotfire® Professional

- Vendor: TIBCO Software Inc. (www.spotfire.tibco.com)
- TIBCO Spotfire® Professional makes it easy to build and deploy reusable analytic applications over the Web, or perform pure ad hoc analytics, driven on-the-fly by your own knowledge, intuition, and desire to answer the next question. Spotfire analytics does all this by letting you interactively query, visualize, aggregate, filter, and drill into data sets of virtually any size. Ultimately you will reach faster insights with Spotfire and bring clarity to business issues or opportunities in a way that gets all the decision makers on the same page quickly.

A.5.3 Commercial Software WITHOUT Trial Version

AdvancedMiner

- Vendor: StatConsulting (www.statconsulting.eu)
- AdvancedMiner is a platform for data mining and analysis, featuring modeling interface (OOP script, latest GUI design, advanced visualization) and grid computing.

Affinium Model

- Vendor: Unica Corp. (www.unica.com)
- Affinium Model (from Unica), includes valuator, profiler, response modeler, and cross-seller. Unica provides innovative marketing solutions that turn your passion for marketing into business success. Our unique interactive marketing approach incorporates customer and Web analytics, centralized decision, cross-channel execution, and integrated marketing operations. More than 1000 organizations worldwide depend on Unica.

IBM SPSS Modeler Professional

- Vendor: SPSS Inc., an IBM company (www.spss.com)
- IBM SPSS Modeler Professional has optimization techniques for large data sets, including boosting and bagging, which improve model stability and accuracy. It also enhanced visualization for key algorithms, including neural net and decision tree. In particular, new interactive visualization for key algorithms and ensemble models is offered in order to make results easier to understand and communicate.

DataDetective

- Vendor: Sentient Information Systems (www.sentient.nl)
- DataDetective, the powerful yet easy to use data-mining platform and the crime analysis software of choice for the Dutch police.

DeltaMaster

- Vendor: Bissantz & Company GmbH (www.bissantz.com)
- Delta Miner is a multiple-strategy tool supporting clustering, summarization, deviation-detection, and visualization processes. A common application is the analysis of financial controlling data. It runs on Windows platforms and it integrates new search techniques and "business intelligence" methodologies into an OLAP front end.

EWA Systems

- Vendor: EWA Systems Inc. (www.ewasystems.com)
- EWA Systems provide enterprise analytics solutions: Math and statistics libraries, data mining, text mining, optimization, visualization, and rules engine software are all available from one coordinated source. EWA Systems' ability to tackle such a broad range of analytical solutions means our clients gain efficiencies in purchasing software that fits together modularly, as well as incurring decreased consulting costs. Our tools have been deployed worldwide in

industries as diverse as financial analysis, e-commerce, manufacturing and education where their outstanding performance and quality is unrivaled. Whether you are using a single PC or a supercomputer, EWA Systems has the numerical software capabilities to fit your need.

FastStats™

- Vendor: APTECO Limited (www.apteco.com)
- FastStats Suite, marketing analysis products, including data mining, customer profiling, and campaign management.

IBM Intelligent Miner

- Vendor: IBM (www.ibm.com)
- DB2 Data Warehouse Edition (DWE) is a suite of products that combines the strength of DB2 Universal Database™ (DB2 UDB) with the powerful business intelligence infrastructure from IBM®. DB2 Data Warehouse Edition provides a comprehensive business intelligence platform with the tools your enterprise and partners need to deploy and build next generation analytic solutions.

KnowledgeMiner

- Vendor: KnowledgeMiner Software (www.knowledgeminer.com)
- KnowledgeMiner, a self-organizing modeling tool that uses GMDH neural nets and AI to easily extract knowledge from data. (MacOS)

MATLAB NN Toolbox

- Vendor: Mathworks Inc. (www.mathworks.com)
- A MATLAB extension implements an Engineering environment for research in neural networks and its design, simulation, and application. It offers various network architectures and different learning strategies. Classification and function approximations are typical data-mining problems that can be solved using this tool. It runs on Windows, Mac, and Unix platforms.

Predictive Data Mining Suite

- Vendor: Predictive Dynamix (www.predx.com)
- Predictive Data Mining Suite integrates graphical and statistical data analysis with modeling algorithms including neural networks, clustering, fuzzy systems, and genetic algorithms.

Enterprise Miner

- Vendor: SAS Institute Inc. (www.sas.com)
- SAS (Enterprise Miner) represents one of the most comprehensive sets of integrated tools for data mining. It also offers a variety of data manipulation and transformation features. In addition to statistical methods, the SAS Data Mining

Solution employs neural networks, decision trees, and SAS Web hound that analyzes Web-site traffic. It runs on Windows and Unix platforms and it provides a user-friendly GUI front end to the Sample, Explore, Modify, Model, Assess (SEMMA).

SPAD

- Vendor: Coheris (www.coheris.fr)
- SPAD, provides powerful exploratory analyses and data-mining tools, including PCA, clustering, interactive decision trees, discriminant analyses, neural networks, text mining and more, all via user-friendly GUI.

Viscovery Data Mining Suite

- Vendor: Viscovery (www.viscovery.net)
- The Viscovery® Data Mining Suite offers a selection of software for predictive analytics and data mining designed to comprehensively address the needs of business and technical users. Workflows support the generation of high-performance predictive models that may be integrated in real-time and updated automatically. The Viscovery Data Mining Suite comprises the modules —Profiler, Predictor, Scheduler, Decision Maker, One(2)One Engine—for the realization of predictive analytics and data mining applications.

Warehouse Miner

- Vendor: Teradata Corp. (www.teradata.com)
- Warehouse Miner provides different statistical analyses, decision-tree methods, and regression methodologies for in-place mining on a Teradata database-management system.

A.6 WEB SITE LINKS

A.6.1 General Web Sites

Web Site	Description
www.ics.uci.edu	A comprehensive machine-learning site. Popular for its large repository of standard data sets and machine-learning programs for experimental evaluation.
www.almaden.ibm.com/cs/quest/	An online resource for research in data mining using IBM Intelligent Miner. It contains Synthetic Data Generation Codes for associations, sequential patterns, and classification.
www.cs.cmu.edu/Groups/AI/html	This address collects files, programs, and publications of interest to the AI research community.
www.cs.reading.ac.uk/people/dwc/ai.html	An online resource to AI programs, software, data sets, bibliographies, and links.

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Web Site	Description
www.datamining.org	This is a site run by a group of users and international data-mining tool providers. It is geared more for business users, and it provides links to many data-mining sites.
http://archive.ics.uci.edu/ml/	Repositories focusing on the scientific study of machine learning.
www.jair.org	*Journal of AI Research:* The journal includes research articles, technical notes, surveys, and expository articles in the field of machine learning.
www.kdnuggets.com	This site contains information about data-mining activities and pointers to past and current research. It maintains a guide to commercial- and public-domain tools for data mining. It also provides links to companies supporting software, consulting, and data-mining services.
www.springerlink.com/content/1384–5810	*Journal of Data Mining & Knowledge Discovery:* The journal consolidates papers in both the research and practice of knowledge discovery, surveys of implementation techniques and application papers.
www.stat.ufl.edu/vlib/statistics.html	An up-to-date online resource to statistical software, data sets, and links.
otal.umd.edu/Olive/Multi-D.html	A list of projects and products for multidimensional visualization.

A.6.2 Web Sites for Data-Mining Software Tools

Web Site	Data-Mining Tool
www.statconsulting.eu	AdvancedMiner
www.unica.com	Affinium Model
www.dazsi.com	AgentBase/Marketeer
www.alice-soft.com	Alice d'Isoft
www.openchannelsoftware.com	Autoclass III
www.bayesia.com	BayesiaLab
kmi.open.ac.uk/projects/bkd/	Bayesian Knowledge Discoverer
www.prevision.com/bmr.html	BMR
http://salford-systems.com/cart.php	CART
www.spss.com/clementine	Clementine
www.oracle.com/technology/documentation/darwin.html	Darwin
www.data-applied.com	Data Applied
www.sentient.nl/?dden	DataDetective
www.dataengine.de/english/sp/index.htm	DataEngine
www.datamining.com	Data Mining Suite

Web Site	Data-Mining Tool
www.cwi.nl/~marcel/ds.html	Data Surveyor
www.dbminer.com	DBMiner
www.hnc.com	DataBase Mining Marksman
www.datamind.com	DataMind
www.cirrusrec.com	Datasage
www.neovista.com	Decision series
www.bissantz.de	Delta Miner
www.pilotsw.com	Discovery
www.palisade.com/	Evolver
www.dataengine.de/english/sp/index.htm	EWA Systems
www.exeura.com/home.php?lan=en	Exeura RialtoTM
www.fairisaac.com/fic/en/our-approach/ enterprise-decision-management	Fair
www.apteco.com	FastStats Suite
www.urbanscience.com	GainSmarts
www.geniqmodel.com/	GenIQ Model
www.fqs.pl/business_intelligence/products/ ghostminer	GhostMiner
www.goldenhelix.com	Golden Helix Optimus RP
www.software.ibm.com	Intelligent Miner
www.spotfire.tibco.com/products/s-plus/ statistical-analysis-software.aspx	Insightful Miner
www.acknosoft.com	KATE Tools
www.ncr.com	Knowledge Discovery Workbench
www.dialogis.de	Kepler
www.dialogis.de	KnowledgeMiner
www.angoss.com	Knowledge Seeker
www.kxen.com	KXEN
www.mathworks.com/products/neuralnet	Matlab neural network toolbox
www.sgi.com	MineSet
www.alta-oh.com	NETMAP
www.neurosolutions.com	Neuro Net
www.neuralware.com/	NeuralWorks Professional II/PLUS
www.nd.com/products.htm	NeuroSolutions v3.0
www.wardsystems.com/	NeuroShell2/NeuroWindows
www.ultranet.com/~unica	PRW
www.printable.com	Powerhouse
www.predx.com	Predictive Data Mining Suite
www.rapid-i.com	RapidMiner
www.sas.com	SAS Enterprise Miner
www.cognos.com	Scenario
www.eric.univ-lyon2.fr/~ricco/sipina.html	Sipina-W
www.nada.kth.se/~orre/snns-manual	SNNS
www.spss.com	SPSS
www.spotfire.tibco.com/products/s-plus/ statistical-analysis-software.aspx	S-Plus

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Web Site	Data-Mining Tool
www.slp.fr	STATlab
www.syllogic.nl	Syllogic
www.mathsoft.com/splus.html	S-Plus
www.fernuni-hagen.de/bwlor/forsch.htm	SPIRIT
www.prevision.com/strategist.html	Strategist
www.eudaptics.co.at/	Viscovery©SOMine
www.incontext.ca	WebAnalyzer
www.mitgmbh.de	WINROSA
www.wizsoft.com	WizWhy

A.6.3 Data-Mining Vendors

Data-Mining Vendor	Address	Web Site
Angoss Software International LTC.	34 St. Patrick Street, Suite 200, Toronto, Ontario, Canada M5T 1V1	www.angoss.com
Attar Software USA	Two Deerfoot Trial on Partridge Hill, Harward, MA 01451, USA	www.attar.com
Business Objects, Inc.	20813 Stevens Creek Blvd., Suite 100, Cupertino, CA 95014, USA	www.businessobjects.com
Cognos Corp.	67 S. Bedford St., Suite 200 W., Burlington, MA 01803, USA	www.cognos.com
DataMind Corp.	2121 S. El Camino Real, Suite 1200, San Mateo, CA 94403, USA	www.datamindcorp.com
HNC Software Inc.	5930 Cornerstone Court West, San Diego, CA 92121, USA	www.hnc.com
HyperParallel	282 Second Street, 3rd Floor, San Francisco, CA 94105, USA	www.hyperparallel.com
IBM Corp.	Old Orchard Road, Armonk, NY 10504, USA	www.ibm.com
Integral Solutions Ltd.	Berk House, Basing View, Basingstoke, Hampshire RG21 4RG, UK	www.isl.co.uk
Isoft	Chemin da Moulon, F-91190 Gif sur Yvette, France	*e-mail*: infor.isoft.fr
NeoVista Solutions, Inc.	10710 N. Tantau Ave., Cupertino, CA 95014, USA	www.neovista.com
Neural Applications Corp.	2600 Crosspark Rd., Coralville, IA 52241, USA	www.neural.com
NeuralWare Inc.	202 Park West Drive, Pittsburgh, PA 15275, USA	www.neuralware.com
Pilot Software, Inc.	One Canal Park, Cambridge, MA 02141, USA	www.pilotsw.com
Red Brick Systems, Inc.	485 Alberto Way, Los Gatos, CA 95032, USA	www.redbrick.com

Data-Mining Vendor	Address	Web Site
Silicon Graphics Computer Systems	2011 N. Shoreline Blvd., Mountain View, CA 94043, USA	www.sgi.com
SPSS, Inc.	444 N. Michigan Ave., Chicago, IL 60611-3962, USA	www.spss.com
SAS Institute Inc.	SAS Campus Dr., Cary, NC 27513-2414, USA	www.sas.com
Thinking Machine Corp.	14 Crosby Dr., Bedford, MA 01730, USA	www.think.com
Trajecta	611 S. Congress, Suite 420, Austin, TX 78704, USA	www.trajecta.com
Daisy Analysis Ltd.	East Green Farm, Great Bradley, Newmarket, Suffolk CB8 9LU, UK	www.daisy.co.uk
Visible Decisions, Inc.	200 Front Street West, Suite 2203, P.O.Box 35, Toronto, Ont M5V 3K2, Canada	www.vdi.com
Maxus Systems International Inc.	610 River Terrace, Hoboken, NJ 07030, USA,	www.maxussystems.com
United Information Systems, Inc.	10401 Fernwood Road, #200, Bethesda, MD 20817, USA	www.unitedis.com/
ALTA Analytics, Inc.	929 Eastwind Dr., Suite 203, Westerville, OH 43081, USA	www.alta-oh.com
Visualize, Inc.	1819 East Morten, Suite 210, Phoenix, AZ 85020, USA	www.visualizetech.com
Data Description, Inc.	840 Hanshaw Road, Suite 9, Ithaca, NY 14850, USA	www.datadesk.com
i2 Ltd.	Breaks House, Mill Court, Great Shelford, Cambridge, CB2, SLD, UK	www.i2.co.uk
Harlequin Inc.	One Cambridge Center, 8th Floor, Cambridge, MA 02142, USA	www.harlequin.com
Advanced Visual Systems, Inc.	300 Fifth Avenue, Waltham, MA 02154, USA	www.avs.com
ORION Scientific Systems	19800 Mac Arthur Blvd., Suite 480, Irvine, CA 92612, USA	www.orionsci.com
Belmont Research, Inc.	84 Sherman St., Cambridge, MA 02140, USA	www.belmont.com/
Spotfire, Inc.	28 State Street, Suite 1100, Boston, MA 02109, USA	www.ivee.com
Precision Computing, Inc.	P. O > Box 1193, Sierra Vista, AZ 85636, USA	www.crimelink.com
Information Technology Institute	11 Science Park Road, Singapore Science Park II, Singapore 117685	jsaic.iti.gov.sg/projects/
NCO Natural Computing	Deurtschherrnufer 31, 60594 Frankfurt, Germany	www.asoc.com
Imagix Corp.	6025 White Oak Lane, San Luis Obispo, CA 93401, USA	www.imagix.com

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Data-Mining Vendor	Address	Web Site
Helsinki University of Technology	Neural Networks Research Center, P. O. Box 1000, FIN-02015 HUT, Finland	websom.hut.fi
Amtec Engineering, Inc.	P. O. Box 3633, Bellevue, WA 98009-3633, USA	www.amtec.com
IBM-Haifa Research Laboratory	Matam, Haifa 31905, Israel	www.ibm.com/java/mapuccino
Infospace, Inc.	181 2nd Avenue, Suite 218, San Mateo, CA 94401, USA	www.infospace-inc.com
Research Systems, Inc.	2995 Wilderness Place, Boulder, CO 80301, USA	www.rsinc.com
GR-FX Pty Limited	P. O. Box 2121, Clovelly, NSW, 2031, Australia	www.gr-fx.com
Analytic Technologies	104 Pond Street, Natick, MA 01760, USA	analytictech.com
The GIFIC Corp.	405 Atlantic Street, Melbourne Beach, FL 32951, USA	www.gific.com
Inxight Software Inc.	3400 Hillview Avenue, Palo Alto, CA 94304, USA	www.inxight.com
ThemeMedia Inc.	8383 158th Avenue NE, Suite 320, Redmond, WA 98052, USA	www.thememediacom
Neovision Hypersystems, Inc.	50 Broadway, 34th Floor, New York, NY 10004, USA	www.neovision.com
Artificial Intelligence Software SpA	Via Carlo Esterle, 9-20132 Milano, Italy	www.iunet.it/ais
SRA International, Inc.	2000 15th Street, Arlington, VA 22201, USA	www.knowledgediscovery.com
Quadstone Ltd.	16 Chester Street, Edinburgh, EH3 7RA, Scotland	www.quadstone.co.uk
Data Junction Corp.	2201 Northland Drive, Austin, TX 78756, USA	www.datajunction.com
Semio Corp.	1730 South Amphlett Blvd. #101, San Mateo, CA 94402, USA	www.semio.com
Visual Numerics, Inc.	9990 Richmond Ave., Suite 400, Houston, TX 77042-4548, USA	www.vni.com
Perspecta, Inc	600 Townsend Street, Suite 170E, San Francisco, CA 94103-4945, USA	www.perspecta.com
Dynamic Diagrams	12 Bassett Street, Providence, RI 02903, USA	www.dynamicdiagrams.com
Presearch Inc.	8500 Executive Park Avenue, Fairfax, VA 22031, USA	www.presearch.com
InContext Systems	6733 Mississauga Road, 7th floor, Mississauga, Ontario L5N 6J5 Canada	www.incontext.ca

Data-Mining Vendor	Address	Web Site
Cygron Research & Development, Ltd.	Szeged, Pf.: 727, H-6701 Hungary	www.tiszanet.hu/cygron/
NetScout Systems, Inc.	4 Technology Park Drive, Westford, MA 01886, USA	www.frontier.com
Advanced Visual Systems	300 Fifth Ave., Waltham, MA 02154, USA	www.avs.com
Alta Analytics, Inc	555 Metro Place North, Suite 175, Dublin, OH 43017, USA	www.alta-oh.com

Data-Mining Vendor	Address	Web Site/Phone Number
MapInfo Corp.	1 Global View, Troy, NY 12180, USA	www.mapinfo.com
Information Builders, Inc.	1250 Broadway, 30th Floor, New York, NY 10001-3782, USA	Phone: 212-736-4433
Prism Solutions, Inc.	1000 Hamlin Court, Sunnyvale, CA 94089, USA	Phone: 408-752-1888
Oracle Corp.	500 Oracle Parkway, Redwood Shores, CA 94086, USA	Phone: 800-633-0583
Evolutionary Technologies, Inc.	4301 Westbank Drive, Austin, TX 78746, USA	Phone: 512-327-6994
Information Advantage, Inc.	12900 Whitewater Drive, Suite 100, Minnetonka, MN 55343, USA	Phone: 612-938-7015
IntelligenceWare, Inc.	55933 W. Century Blvd., Suite 900, Los Angeles, CA 90045, USA	Phone: 310-216-6177
Microsoft Corporation	One Microsoft Way, Redmond, WA 98052, USA	Phone: 206-882-8080
Computer Associates International, Inc.	One Computer Associates Plaza, Islandia, NY 11788-7000, USA	Phone: 516-342-5224