Foreword

Knowledge Discovery in Databases has been attracting significant attention in the last few years. The rapid growth of data and information has created a need and an opportunity for extracting knowledge from databases, and both researchers and application developers have been responding to that need.

Knowledge Discovery is an area of common interest for researchers in machine learning, statistics, intelligent databases, knowledge acquisition, and expert systems, focusing on unifying themes such as the use of domain knowledge, managing uncertainty, interactive discovery, and transition from research to application.

KDD applications have been developed for astronomy, insurance, marketing, software engineering, medicine, manufacturing, stock market analysis, and many other fields. A number of these applications are described in Part I of this volume. Discovery of probabilistic and functional data dependencies is a very large area of research, with many exciting recent developments. Some of them are presented in Part II of this volume. Part III part examines Integrated and Interactive systems, which combine multiple discovery algorithms, including human guidance. Part IV deals with Database-Specific Techniques and Part V covers discovery in Textual Documents.

For this workshop we received 40 submissions, mostly from USA, but also from Canada, Finland, France, Germany, Italy, and Japan. About two thirds of the papers were accepted by the program committee. The papers in this volume are organized in 5 parts, with parts I–III corresponding to the workshop sessions. The first three papers in each of these parts are those presented at the workshop.

I grateful to the program committee for their input and advice and especially to Chris Matheus for his help in organizing this workshop and producing this volume, and to Sam Uthurusamy for organizing the Posters and Demos session. Of course, this workshop would not be possible without all the researchers and practitioners who submitted papers or otherwise expressed interest in KDD-93. Shri Goyal has been a great source of support and encouragement for all of our work on KDD.

Gregory Piatetsky-Shapiro, KDD-93 workshop chairman
GTE Laboratories

KDD-93 Program Committee

Alex Borgida, *Rutgers University*
Greg Cooper, *University of Pittsburgh*
William Frawley, *GTE Laboratories*
Larry Kerschberg, *George Mason University*
Chris Matheus, *GTE Laboratories*
Mary McLeish, *University of Guelph, Canada*
Padhraic Smyth, *JPL*
Samy Uthurusamy, *GM Research Laboratories*

Nick Cercone, *University of Regina, Canada*
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Alex Tuzhilin, *New York University*
Jan Zytkow, *Wichita State University*