The Second International Conference on Knowledge Discovery & Data Mining

Call for Papers

K nowledge discovery in databases (KDD), also referred to as *data mining,* is an area of common interest to researchers in machine discovery, statistics, databases, knowledge acquisition, machine learning, data visualization, high performance computing, and knowledge-based systems. 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. KDD applications have been developed for astronomy, biology, finance, insurance, marketing, medicine, and many other fields.

The first international conference on Knowledge Discovery and Data Mining (KDD-95), held in Montréal in August 1995, was an outstanding success, attracting over 340 participants. The second international conference will follow up the success of KDD-95 by bringing together researchers and application developers from different areas focusing on unifying themes. The topics of interest include, but are not limited to:

Theory and Foundational Issues in KDD:
- Data and knowledge representation for KDD
- Probabilistic modeling and uncertainty management in KDD
- Modeling of structured, unstructured and multimedia data
- Metrics for evaluation of KDD results
- Fundamental advances in search, retrieval, and discovery methods
- Definitions, formalisms, and theoretical issues in KDD

Data Mining Methods and Algorithms:
- Algorithmic complexity, efficiency and scalability issues in data mining
- Probabilistic and statistical models and methods
- Using prior domain knowledge and reuse of discovered knowledge
- Parallel and distributed data mining techniques
- High dimensional datasets and data preprocessing
- Unsupervised discovery and predictive modeling

KDD Process and Human Interaction:
- Models of the KDD process
- Methods for evaluating subjective relevance and utility
- Data and knowledge visualization
- Interactive data exploration and discovery
- Privacy and security

Applications:
- Data mining systems and data mining tools
- Application of KDD in business, science, medicine and engineering
- Application of KDD methods for mining knowledge in text, image, audio, sensor, numeric, categorical or mixed format data
- Resource and knowledge discovery using the Internet

This list of topics is not intended to be exhaustive but an indication of typical topics of interest. Prospective authors are encouraged to submit papers on any topics of relevance to knowledge discovery and data mining.

Demonstration Sessions

KDD-96 also invites working demonstrations of discovery systems. Exact details on how to arrange a demo at KDD-96 will be forthcoming.

Submission and Review Criteria

Both research and applications papers are solicited. All submitted papers will be reviewed on the basis of technical quality, relevance to KDD, novelty, significance, and clarity. Authors are encouraged to make their work accessible to readers from other disciplines by including a carefully written introduction. Papers should clearly state their relevance to KDD.

Please submit 5 hardcopies of a short paper (a maximum of 9 single-spaced pages not including cover page but including bibliography, 1 inch margins, and 12 pt. font)to be received by March 18, 1996. A cover page must include author(s) full address, email, paper title and a 200 word abstract, and up to 5 keywords. This cover page must accompany the paper. In addition, an ascii version of the cover page should be sent electronically via email to kdd96@almaden.ibm.com by March 18th 1995 (preferably earlier for email). For the electronic title page, authors are required to use the template made available by ftp. Please visit http://www-aig.jpl.nasa.gov/kdd96/ to retrieve the electronic template.

Please mail the 5 hardcopies of the full papers to :
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Email: kdd@aaai.org   Web: http://www.aaai.org

Important Dates

- March 18, 1996—Submissions and an ascii title page due
- April 19, 1996—Acceptance notification mailed
- May 20, 1996—Camera ready copy due

KDD-96 Organization

General Conference Chair: Usama M. Fayyad, Jet Propulsion Laboratory
Publicity Chair: Padhraic Smyth, Jet Propulsion Laboratory
Sponsorship Chair: Gregory Piatetsky-Shapiro, GTE Laboratories
Program Cochairs: Jia Wei Han, Simon Fraser University, and Evangelos Simoudis, IBM Almaden Research Center

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- **General and Publicity Issues**
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