

Preface

Welcome to FSDM'10

Knowledge discovery and data mining (KDD) is a multidisciplinary field that researches and develops theories, algorithms and software systems to mine gold nuggets of knowledge from data. The increasingly large data sets from many application domains have posed renewed challenges to KDD; in the meantime, new types of data are evolving such as social media, text, and microarray data. Researchers and practitioners in multiple disciplines and various IT sectors confront similar issues in feature selection, and there is still a pressing need for continued exchange and discussion of challenges and ideas, exploring new methodologies and innovative approaches in search of breakthroughs.

Feature selection is effective in data preprocessing and reduction, thus is an essential step in successful data mining applications. Feature selection has been a research topic with practical significance in many areas such as statistics, pattern recognition, machine learning, and data mining (including Web, text, image, and microarrays). The objectives of feature selection include: building simpler and more comprehensible models, improving data mining performance, and helping prepare, clean, and understand data. The Workshop on Feature Selection in Data Mining (FSDM) aims to further the cross-discipline, collaborative effort in feature (a.k.a. variable) selection research and application. This year, FSDM is held with the 14th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2010) in Hyderabad, India.

FSDM'10 consists of one keynote speech and 8 peer-reviewed papers. In which four papers are on developing new algorithms or improving existing algorithms of feature selection; two papers on designing effective feature selection algorithms for real-world problems; and three papers on exploring novel problems in feature selection research.

It has been an enjoyable journey for us to work together with program committee members and authors to make this workshop a reality. We would like to convey our immense gratitude to the PC members for spending their precious time helping review and select papers, and to all the authors for their contributions and efforts in generating the FSDM'10 proceedings. Last but not least, we would like to thank Neil Lawrence from JMLR, and the organizers of PAKDD for their guidance and help in producing the proceedings and in organizing this workshop.

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Workshop web site

<http://featureselection.asu.edu/fsdm10/index.html>