



**İSTANBUL TEKNİK ÜNİVERSİTESİ**  
**MATEMATİK MÜHENDİSLİĞİ**  
**BÖLÜM SEMİNERİ**

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**Konuşmanın Başlığı:** Introduction to Data Mining

**Konuşmanın Özeti:** Data mining is an important analytical tool as organisations deal with increasingly large data sets. It is about discovering patterns in the big data sets, and converting data into information or learning from data. It is important to prepare graduates of our courses (statistics and/or mathematics and/or computing) to their future work by providing them opportunities to learn how to deal with big, complicated and complex data sets.

Data mining uses techniques from different disciplines such as statistics, computing and machine learning. This talk is an introduction to data mining where why and where data mining is used will be described. Various data mining techniques under the umbrella of undirected and directed knowledge discovery will be introduced. The modelling techniques include market basket analysis (MBA), cluster analysis (CA) and various classification models such as decision trees, neural networks (NN) and support vector machines (SVM). Cross Industry Standard Process for Data Mining (CRISP-DM) will also be discussed as part of this talk to guide future data mining projects. Finally, freely available R and RStudio and a commercial software, IBM SPSS Modeler will be introduced.

**Keywords:** Data Mining; Statistics Education; Authentic Assessment(s).

*Tarih: 29 Eylül 2017 Cuma*

*İkram: 10:30-11:00*

*Seminer: 11:00-12:00*

*Yer: Matematik Mühendisliği B1-326*

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