

## EINLADUNG

Zeit: Donnerstag, 4. Dezember 2014, 12.15 Uhr

Ort: Hörsaal AH VI, Ahornstr. 55

Referent: Prof.-Dr. Ira Assent  
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Thema: Outlier detection and explanation

Outliers are data objects that deviate from the remainder of the data. Outlier analysis finds such deviating objects for error or fraud detection, or for the identification of rare events. In this talk, we present two recent approaches for outlier analysis that make it easier for non-data mining experts to use outlier analysis in working with their domain data.

In the first approach, we address the issue of understanding and validating outliers. Traditionally, outlier analysis simply provides the outliers or their outlierness scores as the only information to the user. This makes it difficult for the user to then understand why an object is considered an outlier or in which way it deviates from the remainder of the data. We propose a method for finding possible explanations that show how the object deviates from the remainder of the data, and we provide algorithmic solutions for their computation.

In the second approach, we study how to incorporate additional domain information on the nature of the outliers into the outlier detection process, and how this combination can be used to build more robust outlier analysis methods. This robustness makes it easier for non-data mining experts to use these methods in working with data also when the nature of the outliers is unknown.

Es laden ein: Die Dozenten der Informatik