



JOHANNES KEPLER  
UNIVERSITÄT LINZ

Netzwerk für Forschung, Lehre und Praxis



Institut für Wissensbasierte  
Mathematische Systeme  
Fuzzy Logic Laboratorium

Univ.Prof. Dr. Erich Peter Klement

Tel.: +43/70/2468-9151

Fax: +43/70/2468-1351

ep.klement@jku.at

Sekretariat:

Sabine Lumpi / DW 9194

sabine.lumpi@jku.at

## Diploma Thesis

### ‘Feature Selection Methods for Classification’

The ‘Department of Knowledge-based Mathematical Systems’ at the Johannes Kepler University Linz is offering a **diploma thesis in the field of machine learning, especially feature selection methods for classification.**

Classification techniques are applied for classifying data samples into different classes. For doing so, first a classifier has to be built from data with machine learning methods.

The need of data samples for achieving accurate classifiers and correct cluster partitions exponentially grows with the number of inputs. Hence, it is necessary to reduce the feature space with so-called feature selection techniques before hand in order to find the most important features.

**In this thesis, feature selection methods for classification should be investigated, described and compared to each other based on some real-world data sets.**

#### **Profile/Personal Qualification of the candidate:**

Ideally, the candidate should have a completed bachelor in Mathematics/Informatics/Mechatronics or any other technical study and be interested in machine learning techniques. Some prior knowledge in machine learning is welcome but not a strict necessity.

#### **Contact:**

Univ.Prof. Dr. Erich Peter Klement,

email: [ep.klement@jku.at](mailto:ep.klement@jku.at)

Dr. Edwin Lughofer,

email: [edwin.lughofer@jku.at](mailto:edwin.lughofer@jku.at)