

Multi-label Classification

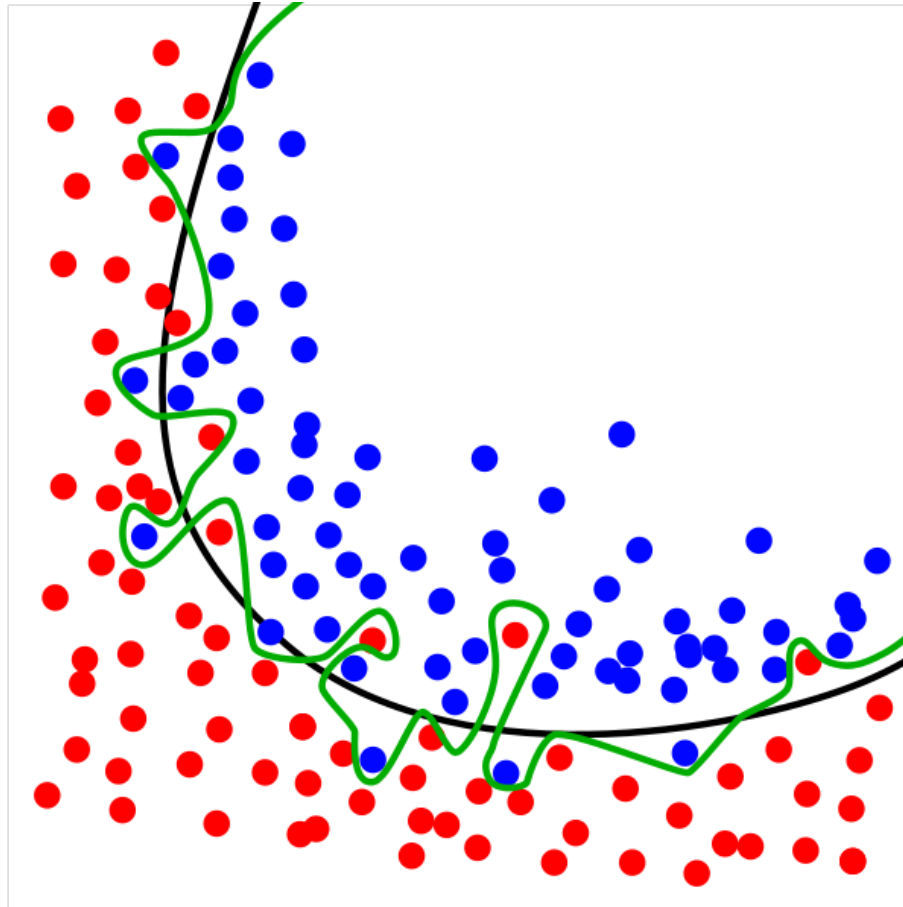
Weiwei Cheng

Knowledge Engineering & Bioinformatics Lab
Department of Mathematics and Computer Science
University of Marburg, Germany



Machine Learning

Data + Generalization = Knowledge





2

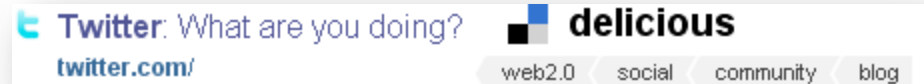


What is Multi-label Classification?

- Conventional classification
 - Instances are associated with a **single label** from a set \mathcal{L} of finite labels
 - if $|\mathcal{L}| = 2$, binary classification;
 - if $|\mathcal{L}| > 2$, multi-class classification.
- Multi-label classification
 - Instances are associated with a **set of labels** $L \subseteq \mathcal{L}$.
 - Label correlation is a key problem.

A paper related to CS, is more likely related to *math*, rather than *law*.

Multi-label Classification



ECML PKDD 2009 (Journal) Paper Notification [491] Conference | X Research | X

★ **Alek Kolcz** to me, eyke, ep09-papers-we.

Dear Weiwei and Eyke,

We are pleased to inform you that your paper

"Combining Instance-Based Learning and Logistic Regression for Multi-Label Classification"

[Reply](#)

- [Conference](#)
- [Party](#)
- [Private](#)
- [Programming](#)
- [Research](#)
- [4 more ▾](#)

www.chengweiwei.com

Some videos at Videlectures.net.

Thanks!