Teaching Unknown Learners to Classify via Feature Importance

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1 MOTIVATION

Software systems can facilitate and enhance education

Teaching relies on providing examples

Selecting examples that are more informative for each particular learner

Improves learning efficiency – less effort both for teacher and student

2 THE FIT APPROACH

All Unobserved Samples

FIT

Next Sample

Teacher

Learner

Updating the Learner’s Model

Prior Knowledge Estimation (based on the learner’s feature weights)

Selection of the Sample that Minimizes the Error

Future Error Computation

Learning Model Definition

Selecting the next teaching sample

Feature Weights

3 RESULTS

![Error vs. # Samples Graph]

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