Learning curve extrapolation techniques across extrapolation settings

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In a nutshell: Learning curve extrapolation techniques perform different depending on the problem setting (size of curve that is already explored, prediction target, etc)

Goal: Compare various learning curve extrapolation techniques across problem settings

Techniques: MDS (Leite and Brazdil, 2005, meta-learning based), MMF (Morgan, Mercer, Flodin, function-based), Best Last (baseline)

Dataset: 3, Learner: SVCs, Last anchor in window: 256, Target: 1448

RQ1: How do the methods perform when we pick an arbitrary curve size and an arbitrary dataset size? (various classifiers)

RQ2: How do the methods perform across various learning curve sizes?

RQ3: How do the methods perform across various learning curve sizes and target sizes?

Conclusions:

● When little data has been explored (small segment of learning curve is available), MDS is superior
● When the learning curve is extrapolated further, both MMF and the baseline perform better
● MMF does generally not outperform the baseline