AutoML libraries

Summary (2020)

System	API	Algorithms	Meta-learners
Auto-WEKA	Java	Classifiers in WEKA.	SMAC.
Hyperopt-sklearn	Python	Some classifiers from sklearn.	TPE, Annealing, GP.
Auto-sklearn	Python	Classif. / reg.	Meta-learning, BO, SMAC, ensembling.
AutoGluon	Python (Linux/Mac)	Tabular / image algos	BO, Hyperband.
Optunity	Python, R, Matlab	Classif. / reg.	PSO, CMA-ES, Sobol sequences, simplex.

What about H2O?

- H2O's focus is on **big data**: native parallelization and GPU usage, but hyperparameter selection is with *random search*.

- There is an ensembling step as in `auto-sklearn`, but it is simple model stacking, not model selection.

- Detailed comparison [here](#).

Links

- Hyperopt-sklearn
- Auto-sklearn
- Optunity
- TPOT, in development

Deep Learning

- Gluon, AutoML for Deep Learning
- Auto-keras

Pure meta-learning

- Learn2Learn
  - Experimental, as of May 2020, not production-ready.