



OpenOpal: An Open Source Optimization and Learning Framework

Develop OpenOpal: a learning and optimization framework for real world problems.

We are developing an open source stochastic optimization and machine learning framework. Our goal is to assemble algorithms developed in our research group together with state of the art optimization and learning techniques from literature in an easy to use graphical environment. The frame work directly supports the intrinsic

parallelism present in many methods using JAVA RMI.

This open source project can be adapted to student interests and expertise. Topics range from the implementation of an advanced module to couple external solver programs to developing, implementing and testing novel optimization and learning algorithms. Example applications range from social systems to fish hydrodynamics

The project is in collaboration with the University of Applied Sciences Aargau (FHA) (Dr. Dirk Bueche).

PREREQUISITES

OO Programming in JAVA
Knowledge in evolutionary computation or machine learning

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