

TuningFork

Team #1




TuningFork

Automatic configuration optimization tool

The tool will find the optimal system configuration based on real inputs to get maximum system utilization and application performance.


Working hard looking for optimal system configuration?



 **TuningFork** saves your time spent on system fine tuning and gives better results in comparison with manual tuning

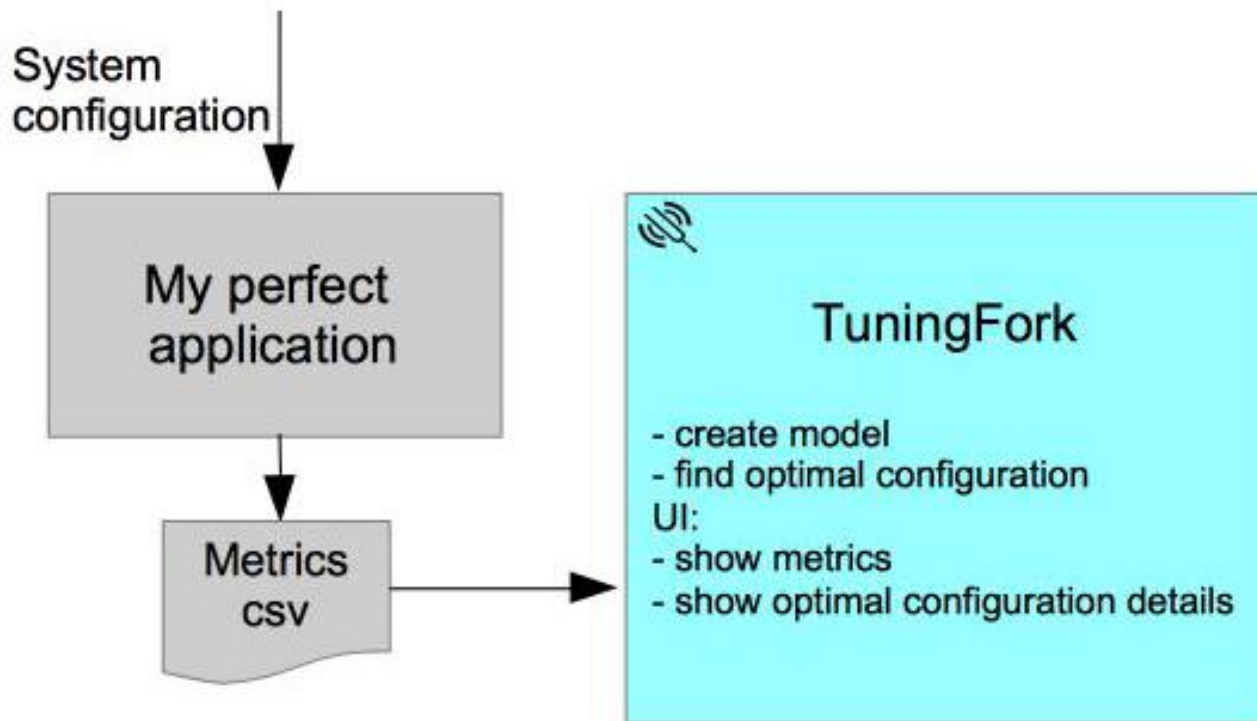


How it works

- Your application will have to implement pre-defined interface in order to run metrics and save results in csv file.
- Every application run with different configuration set will create a line in csv file.
-  **TuningFork** will
 - Load csv file
 - Build model
 - Find optimal configuration set for the best results
 - Present metrics and results

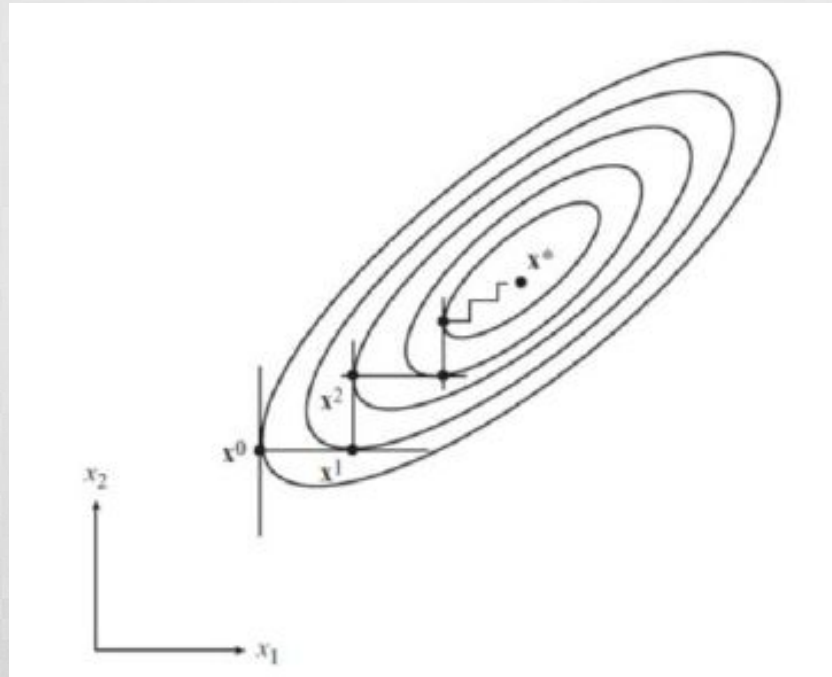


TuningFork flow



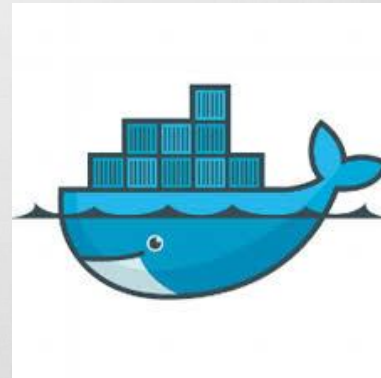
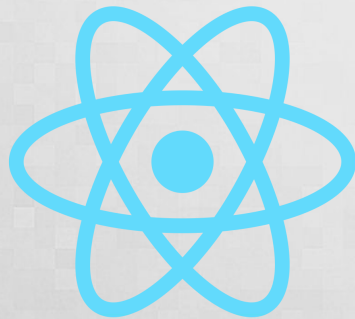
Modeling & Optimization

- Ridge Regression
- Search Optimization for HyperParameter:
RandomizedSearch



Tech Stack

- Python 3.x
- Python libraries: numpy, scipy, sklearn
- Test app - springboot app
- Docker and Docker Compose for easy deployment
- UI: React, C3 and material UI



Thank
you!