

Two Functional MDD's for the Price of One - Part 2

TODO add list of authors

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Outline

- 1 Symphony - Modeling Language for Non-Linear Optimization
- 2 Sample Problem 1
- 3 Sample Problem 2
- 4 Sample Problem 3
- 5 Hashed Expression - Symphony's Backend
- 6 References

Symphony - Modeling Language for Non-Linear Optimization

- Models linear and non-linear programming problems
- Simple declarative language
- Support for bounded parameters and constraint programming
- Generates performance oriented c code
- Solver Agnostic (plug into your solver of choice)

Velocity Problem

(Brain Problem)

Play with generating HDF5

(Multi-Coil MRI / Constraint Programming)

Play with Scaling Factor

Play With L2-Norm / Huber Penalty

Hashed Expression - Symphony's Backend

- Embedded Language in Haskell

References