Two Functional MDD's for the Price of One - Part 1

TODO add list of authors

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Outline

Model Driven Development

Linear Programming

$$\text{Minimize} \quad \sum_{i=0}^{n} c_i x_i \tag{1}$$

$$\text{Subject to} \quad Ax \leq b \tag{2}$$

AMPL Example - Linear Programming

#+BEGIN$_{\text{EXAMPLE}}$ main = putStrLn "Hello World" #+BEGIN$_{\text{EXAMPLE}}$

Non-Linear Programming

AMPL Example - Non Linear Programming

MRI Trajectory Design

Optimizing A Simple Parabola

AMPL / NEOS Server

C / IPOPT Code

Hashed Expression - Symphony's Backend

- Embedded Language in Haskell

References