

Objective-First Nanophotonic Design Plan

Jesse Lu

July 18, 2012

Contents

1	Goal	1
----------	-------------	----------

1 Goal

Software to solve the following general inverse design problem in nanophotonics.

$$\begin{array}{ll} \text{minimize} & f(x) + g(z) \end{array} \quad (1a)$$

$$\begin{array}{ll} \text{subject to} & A(z)x - b(z) = 0two \end{array} \quad (1b)$$

The software will include two