

1**Problem statement**

Design parameters

Sampling

Topology

Value range

Constraints**Objectives****2****HM Data mining**

HM template model

Sampling

HM compute

103680 motor designs**3****Deep ANN training****103680 motor designs**

K-fold cross check

Training

Deep regression ANN**4****Optimization****Deep regression ANN**

Convex optimization

Results**Objectives****Constraints**