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## Design Specification

Design parameters

**Sampling**

Topology

Value range

**Constraints****Objectives****2**

## FEA Data mining

FEA template model

**Sampling**

HPC batch jobs

**56656 motor designs****3**

## Deep ANN training

**52961 FEA results set**

K-fold cross check

Training

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

## Optimization

**Deep regression ANN**

Convex optimization

**Results****Objectives****Constraints**