Review of current place machine learning occupies within the field of architecture

* + Define machine learning:
    - Supervised vs unsupervised
  + Tools available: Tensorflow, SciKitLearn, Lunchbox ML
    - Used via python libraries, grasshopper within rhinoceros
* Difference between lunchbox ML grasshopper components, potential uses and examples
* Pros/cons of pure code vs grasshopper for architects/firms:
  + Code allows flexibility, OS agnostic
  + Grasshopper implementation easier to reproduce, teach to coworkers
* Explanation of thesis direction
  + Shift from geometry to energy performance
  + How machine learning can replace traditional building simulation tools with large enough data sets for the algorithm to train on
    - Surrogate modeling
  + Possibility of using crowdfunding/crowdsourcing of training data?
    - Even viable to expect designers/firms to contribute their data to an open-source project such as this?

A picture containing diagram

Description automatically generatedFigure 1: Non-linear regression using Lunchbox ML