ENGINEERING
DESIGN
AND
COMPUTING

Structural Optimization 2025
Project #2 Bonus Task

Student: Alexandru Olareanu
ID Number:21-953-294

Bonus Task :

Some ideas I have for improving the surrogate model to obtain better results:

- More data points always increase accuracy.
- Use Lattin Hypercube based sampling (discussed in class)
- Use neural networks (doing a course on them Right now!)
- Use better "features"—rather" - rather than a quadratic model, which is very simple, we could build one of arbitrary order - or even use other functions apart from polynomials. Could go in the direction of ML and use Kernelised regression algorithms for more advanced prediction capability (still need huge amounts of data for those).