CMP 756 HW3

Do the following HW and send the relevant files by e-mail until 11 May 2022 23:59 at the latest. (bkurkcu@cs.hacettepe.edu.tr)

For the below problem do the following:

1. Code a simple PSO to solve the problem. To do this you need to encode the problem, initialize a population, select a velocity update equation, and select a stopping criterion.
2. Run your PSO.
3. Please include your code with your homework.
4. Please describe your algorithm.

Problem

This is the six hump camelback function where x lies between ± 3 and y lies between ± 2. The objective is to minimize z. The global minimum lies at (-0.0898, 0.7126) where z = -1.0316.

$$z = (4 - 2.1x^2 + \frac{x^4}{3})x^2 + xy + (-4 + 4y^2)y^2$$