

CPE 341 Optimization Design
Homework: Genetic Algorithm

Due on Monday 8 Nov, 2021 on LEB2 at 1pm, and presentation & demo in class on 9 Nov, 2021.

Consider solving the following optimization problem with Genetic Algorithm

$$\text{Minimize } F(X) = X^3 - 60X^2 + 900X + 150$$

where $X = \text{positive integer}, X \leq 64$

Describe your GA design, string encoding, parameter settings (parent selection method, crossover and mutation methods and rates, etc.) and results with average and max from 5 simulation runs.