

Heuristics

Homework No. 5: Genetic Algorithm

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Please write a computer program that implements the Binary Genetic Algorithm in Lecture 2 of GA.

$$f(x_1, x_2) = 21.5 + x_1 \cdot \sin(4\pi x_1) + x_2 \cdot \sin(20\pi x_2),$$

$$x_1 \in [-3.0, 12.1], x_2 \in [4.1, 5.8]$$

x1 長度15100000 $2^{24}=16777216$

x2 長度1700000 $2^{21}=2097152$

- You are required to hand in the code, an MS-Word file and a hard copy for a summary of your numerical experiments above.
- Due date: 0:00 Dec 1, 2020 on E3 system (No late homework)