

SP2 Assignment

I changed **flip_mutate** to **informed_mutate** function. What I did in new function is that, first I find bin weights(bw) for given individual, then I find bin with highest score and bin with lowest score. Then, I replace first highest scored 10 bins with lowest scored bins. That way, algorithm achieves 200-500 scores on 10 runs:

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Run 0: difference = 412, bin weights = [27368, 27705, 27685, 27454, 27293, 27600, 27587, 27633, 27623, 27502]
Run 1: difference = 392, bin weights = [27428, 27736, 27408, 27494, 27482, 27555, 27515, 27400, 27640, 27792]
Run 2: difference = 328, bin weights = [27664, 27381, 27454, 27516, 27645, 27447, 27437, 27580, 27617, 27709]
Run 3: difference = 252, bin weights = [27497, 27485, 27471, 27453, 27705, 27519, 27679, 27607, 27576, 27458]
Run 4: difference = 126, bin weights = [27608, 27517, 27557, 27579, 27507, 27502, 27562, 27569, 27482, 27567]
Run 5: difference = 175, bin weights = [27602, 27587, 27514, 27571, 27542, 27442, 27586, 27485, 27617, 27504]
Run 6: difference = 514, bin weights = [27413, 27564, 27459, 27512, 27296, 27597, 27633, 27810, 27666, 27500]
Run 7: difference = 313, bin weights = [27519, 27698, 27499, 27452, 27633, 27572, 27385, 27689, 27612, 27391]
Run 8: difference = 359, bin weights = [27359, 27718, 27391, 27666, 27603, 27654, 27507, 27382, 27682, 27488]
Run 9: difference = 292, bin weights = [27644, 27602, 27664, 27420, 27446, 27649, 27372, 27653, 27531, 27469]
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Our plot is:

