	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit_0	
•••	0.35	0.77	0.56	0.5	0.65	0.5	0.49	0.59	beta matrix
• • •	0	1	1	1	1	0	0	1	global best
• • •	1	1	0	1	0	0	1	0	1000100004
•••	1	1	0	1	0	0	1	U	local worst
• • •	0.35	0.77	$0.56 + \theta$	0.5	$0.65 + \theta$	0.5	0.49	$0.59 + \theta$	updated beta matrix