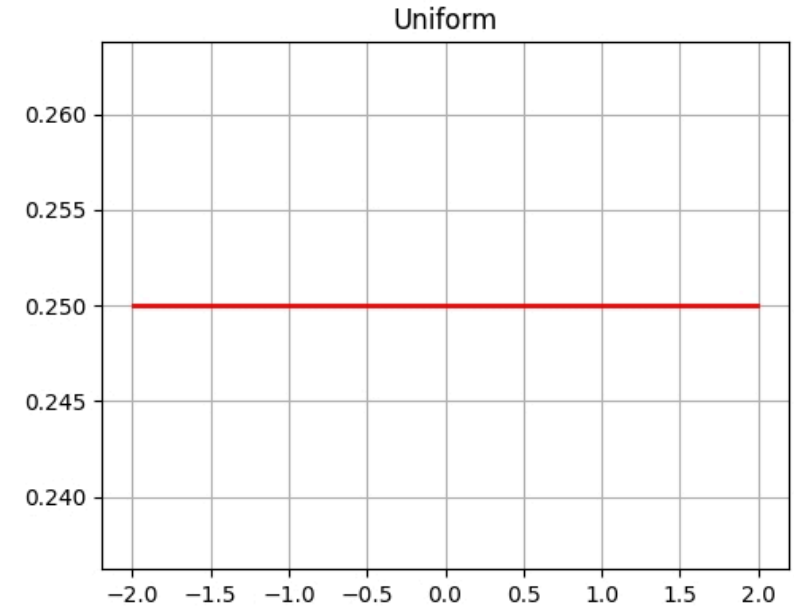
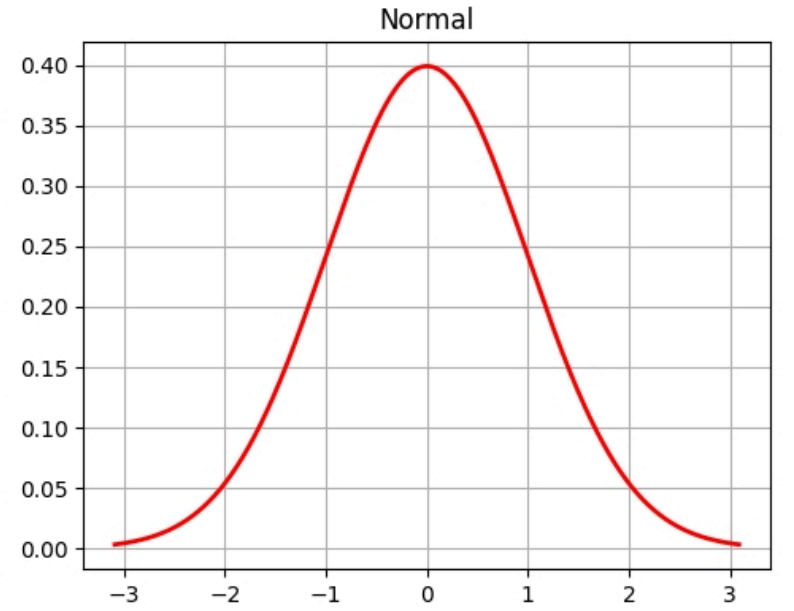
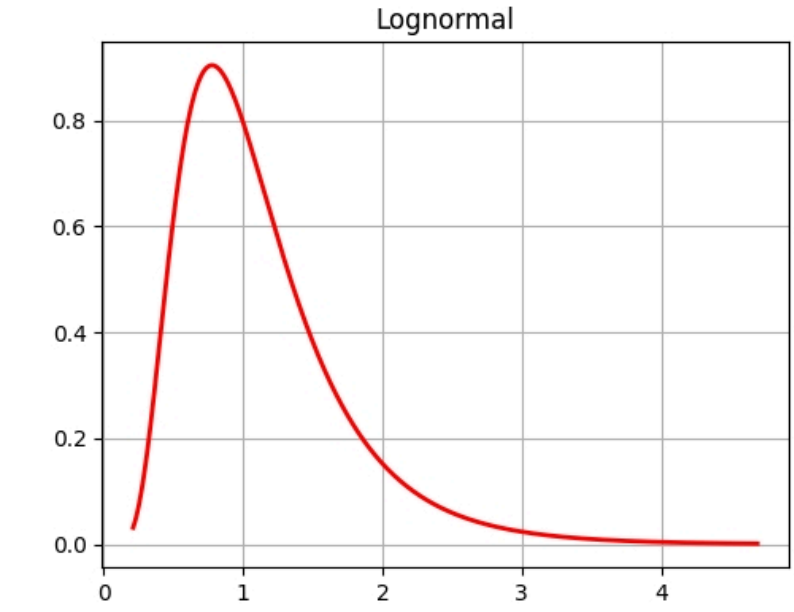
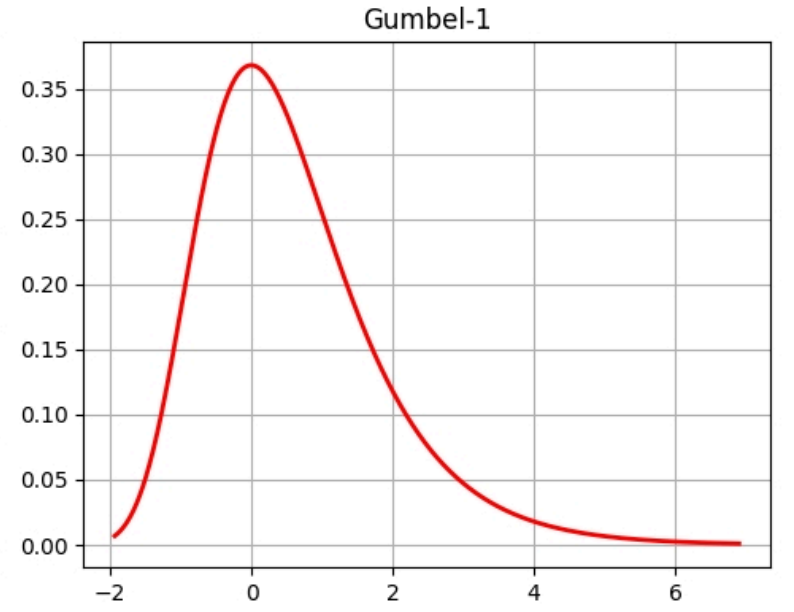
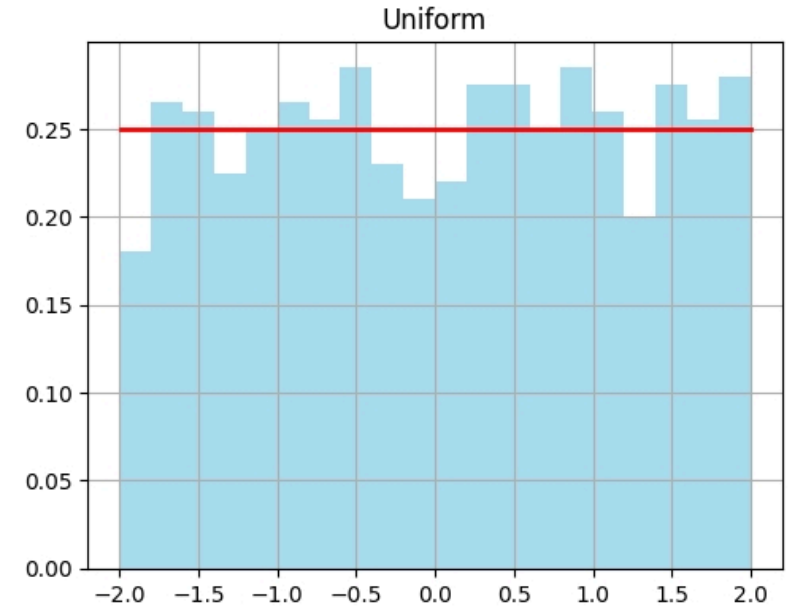
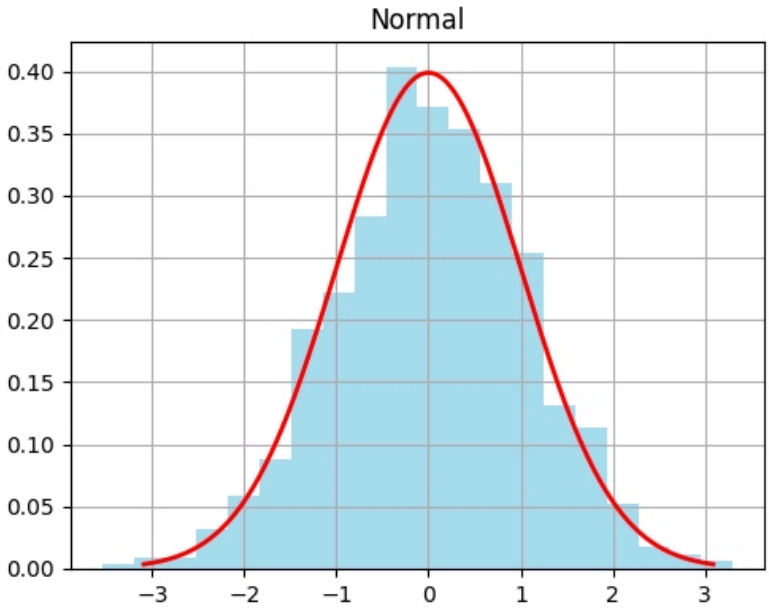

Uniform
0.260
0.255
0.250
0.245
0.240
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
1.5
2.0

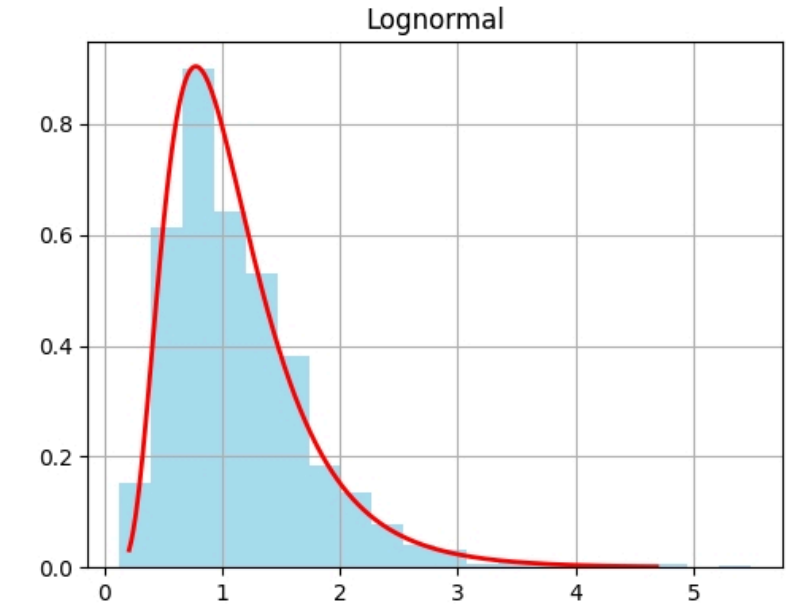

Normal
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−3
−2
−1
0
1
2
3

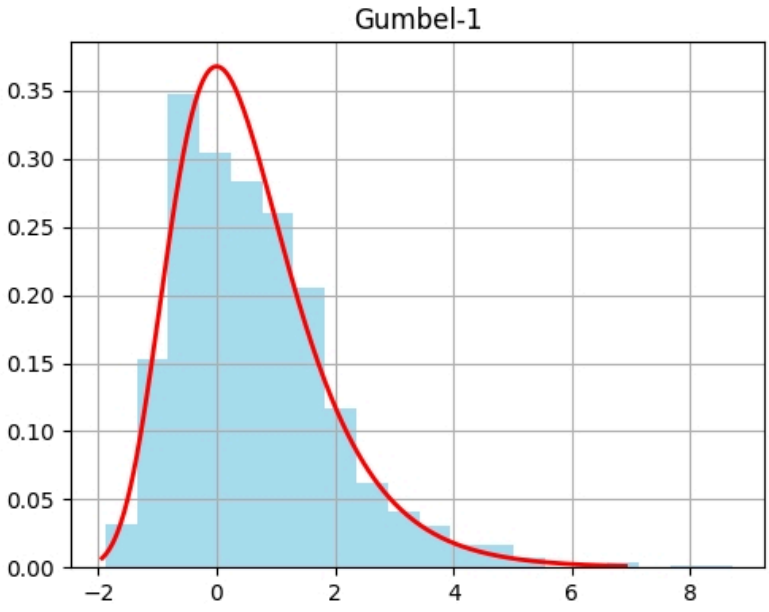

Lognormal
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4

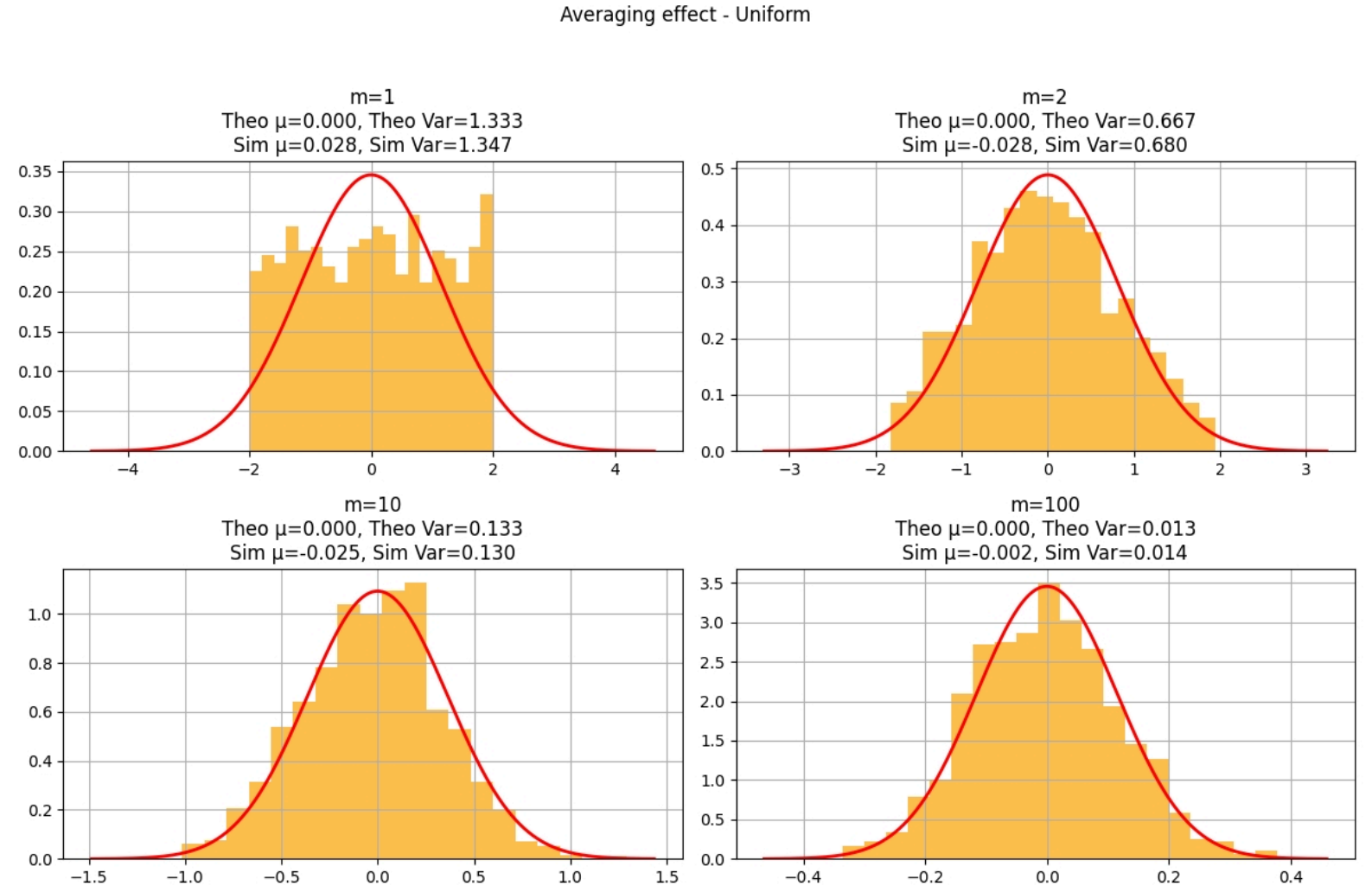

Gumbel-1
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−2
0
2
4
6

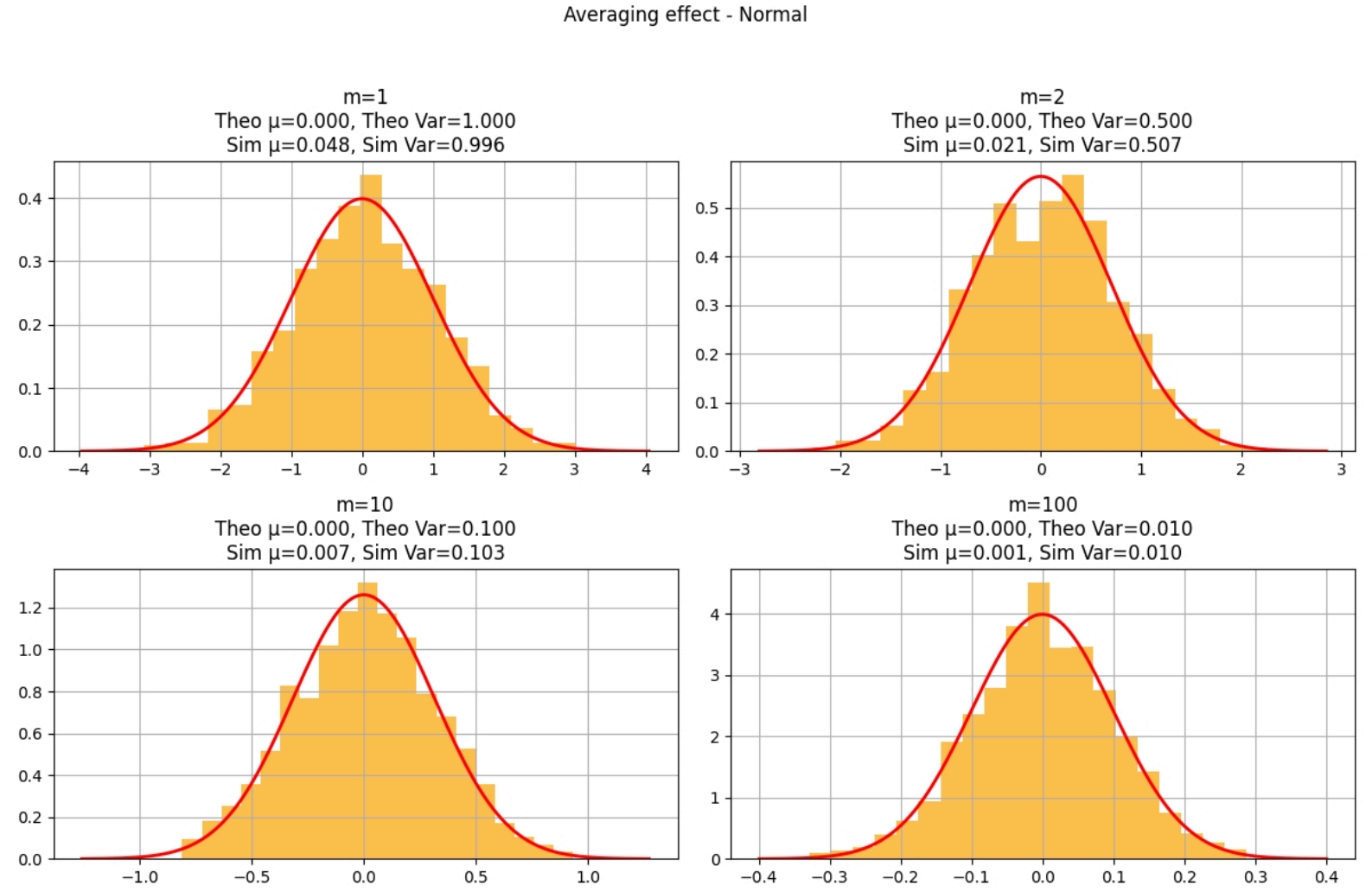

Uniform
0.25
0.20
0.15
0.10
0.05
0.00
−2.0
−1.5
−1.0
−0.5
0.0
0.5
1.0
1.5
2.0

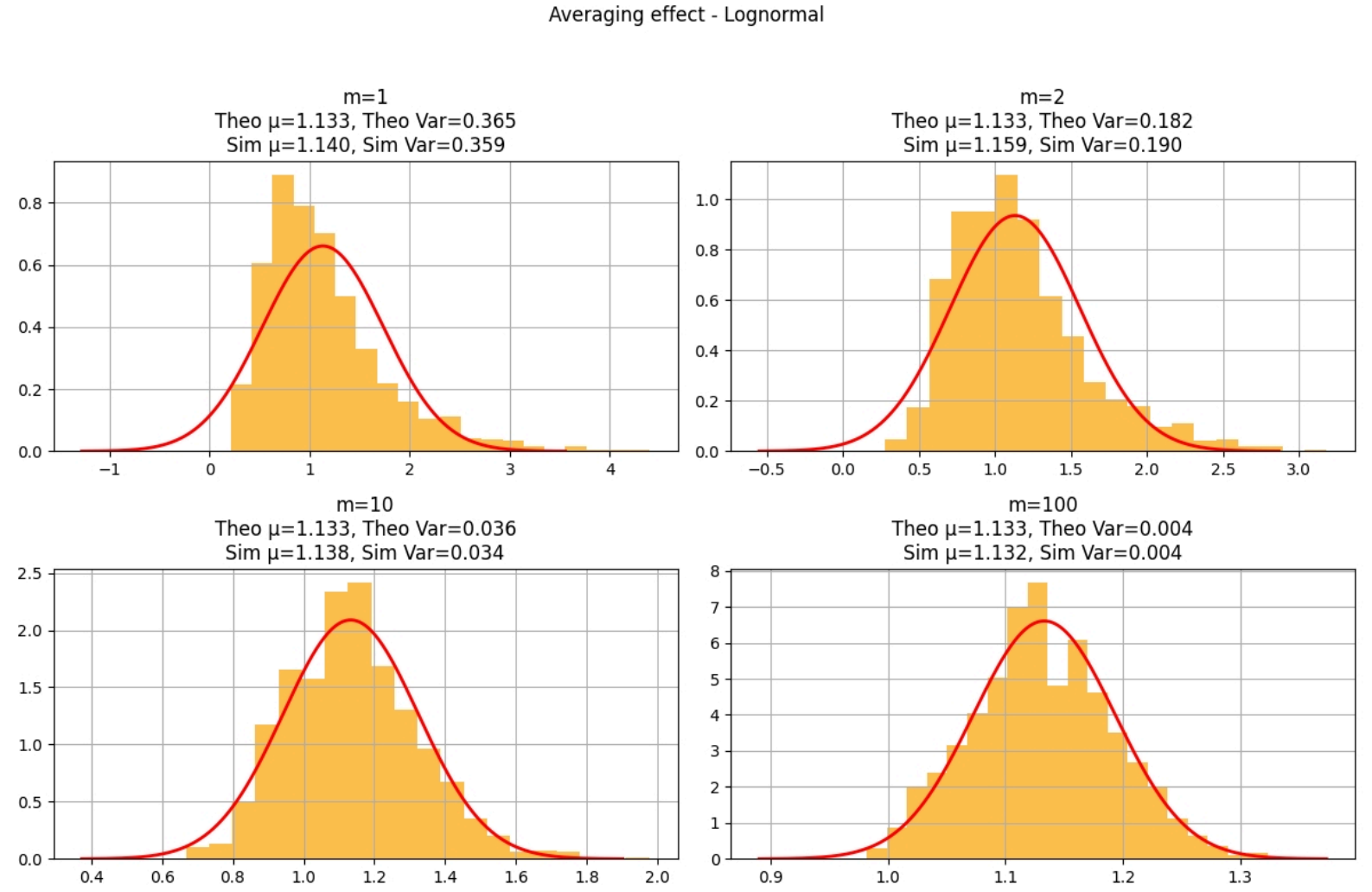

Normal
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−3
−2
−1
0
1
2
3

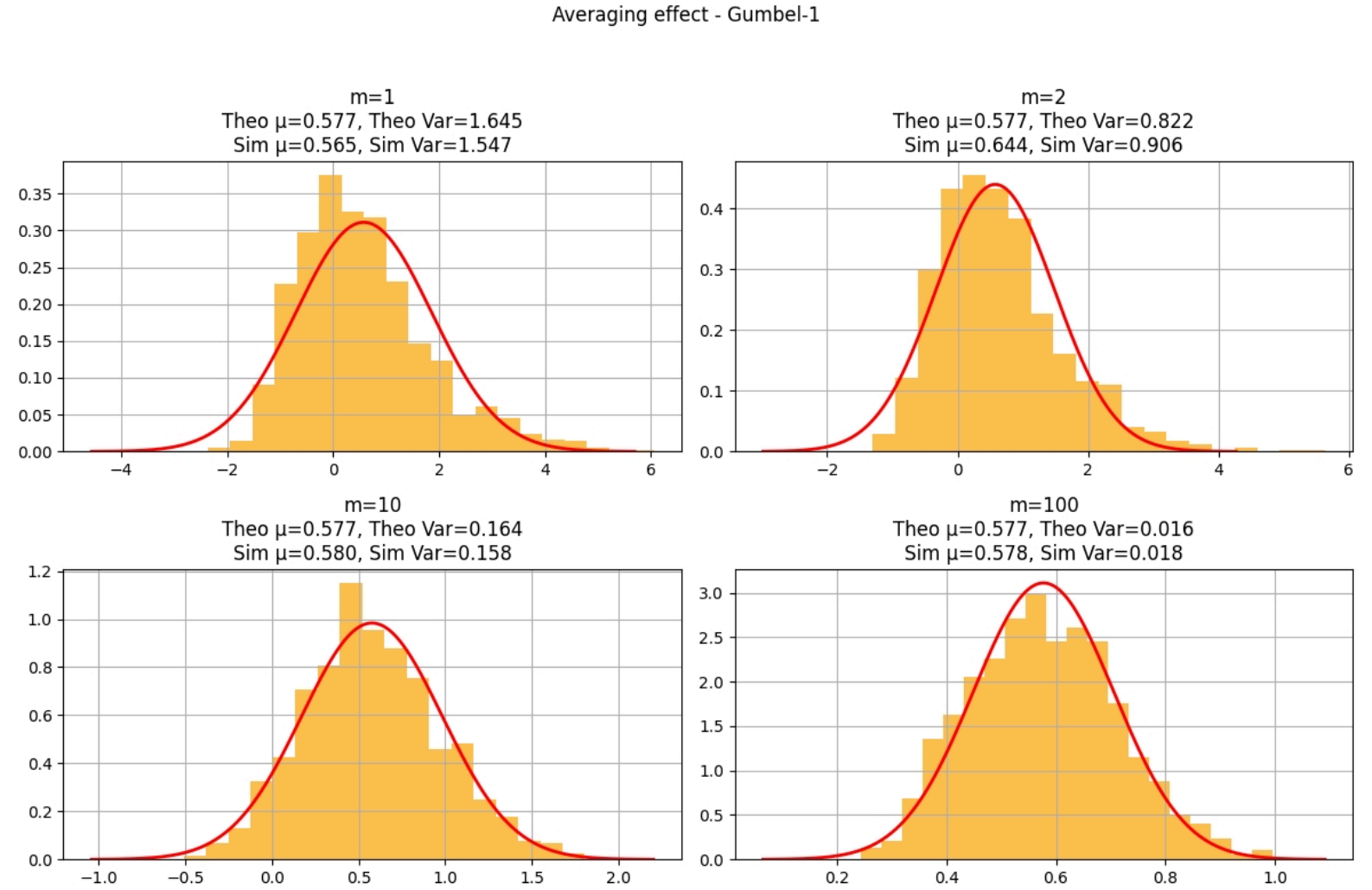

Lognormal
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
5

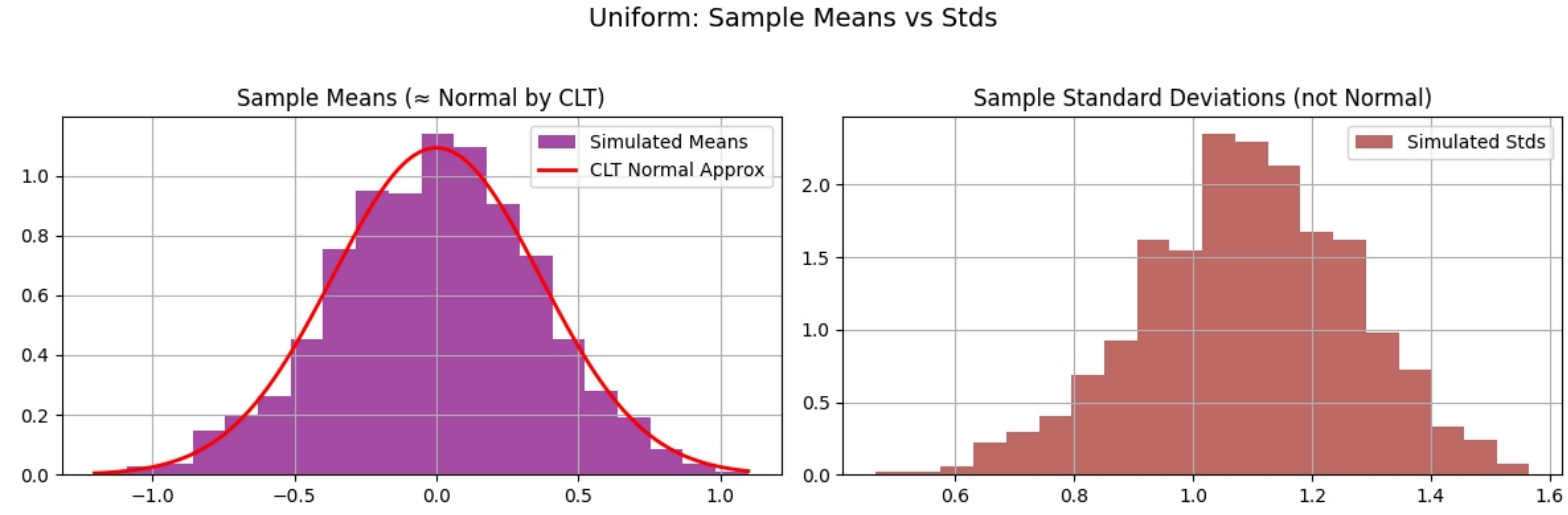

Gumbel-1
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−2
0
2
4
6
8

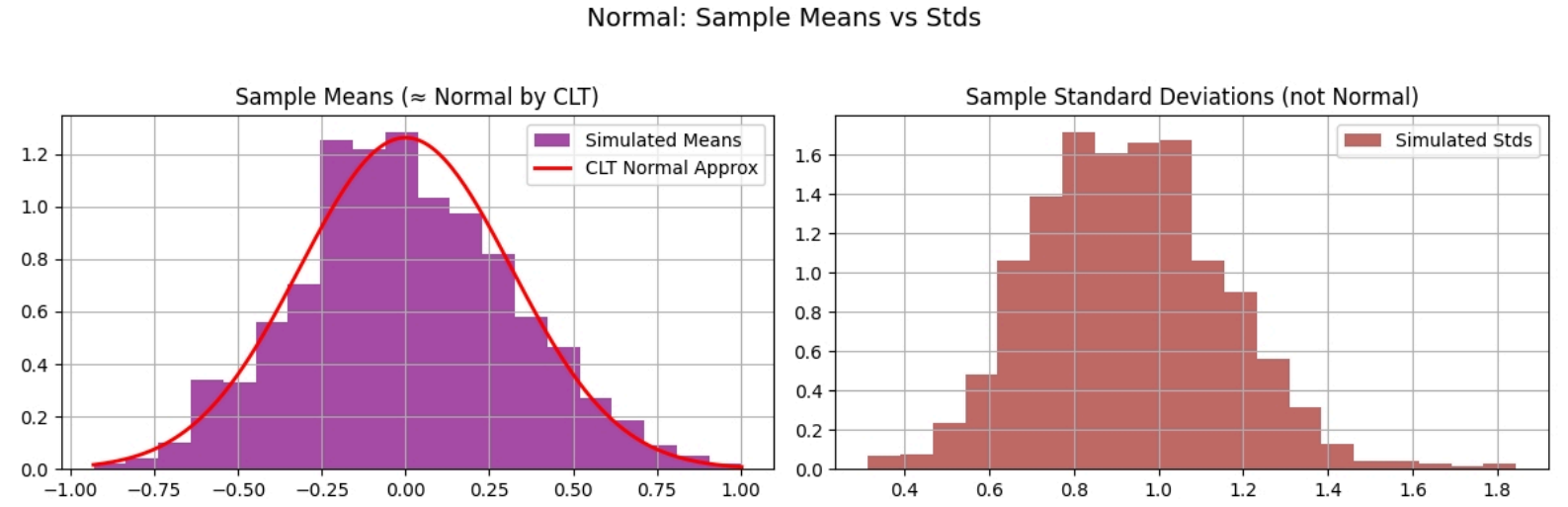

Averaging effect - Uniform
m=1
Theo μ=0.000, Theo Var=1.333
Sim μ=0.028, Sim Var=1.347
m=2
Theo μ=0.000, Theo Var=0.667
Sim μ=-0.028, Sim Var=0.680
m=10
Theo μ=0.000, Theo Var=0.133
Sim μ=-0.025, Sim Var=0.130
m=100
Theo μ=0.000, Theo Var=0.013
Sim μ=-0.002, Sim Var=0.014

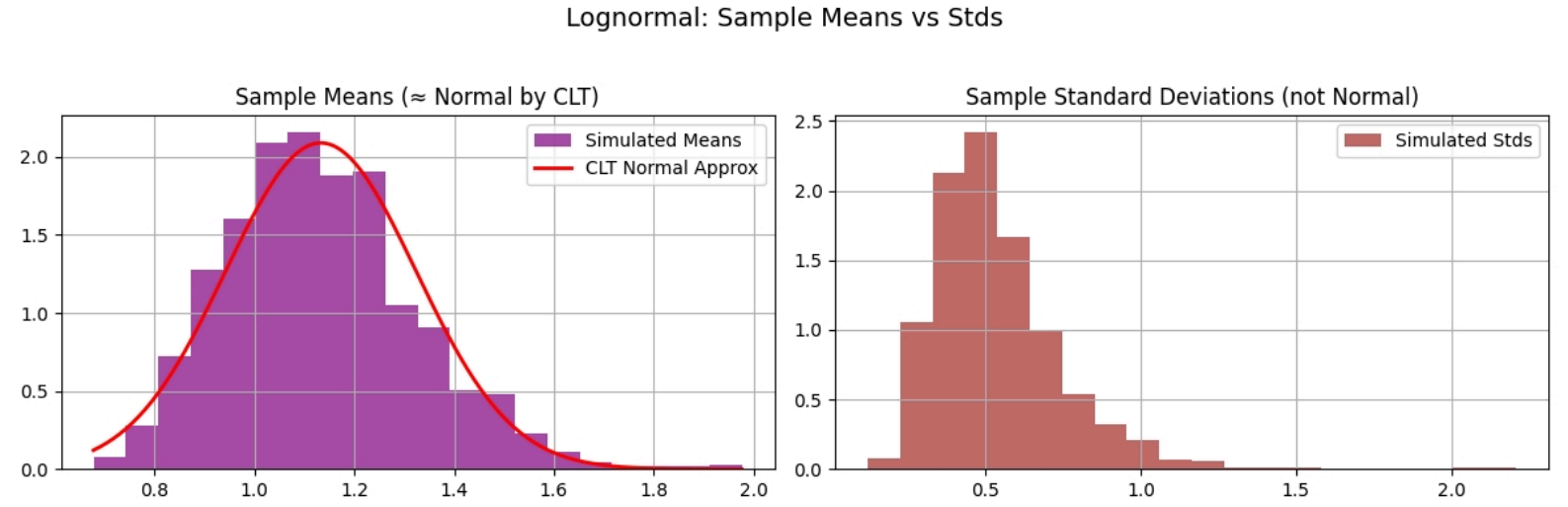

Averaging effect - Normal
m=1
Theo μ=0.000, Theo Var=1.000
Sim μ=0.048, Sim Var=0.996
m=2
Theo μ=0.000, Theo Var=0.500
Sim μ=0.021, Sim Var=0.507
m=10
Theo μ=0.000, Theo Var=0.100
Sim μ=0.007, Sim Var=0.103
m=100
Theo μ=0.000, Theo Var=0.010
Sim μ=0.001, Sim Var=0.010

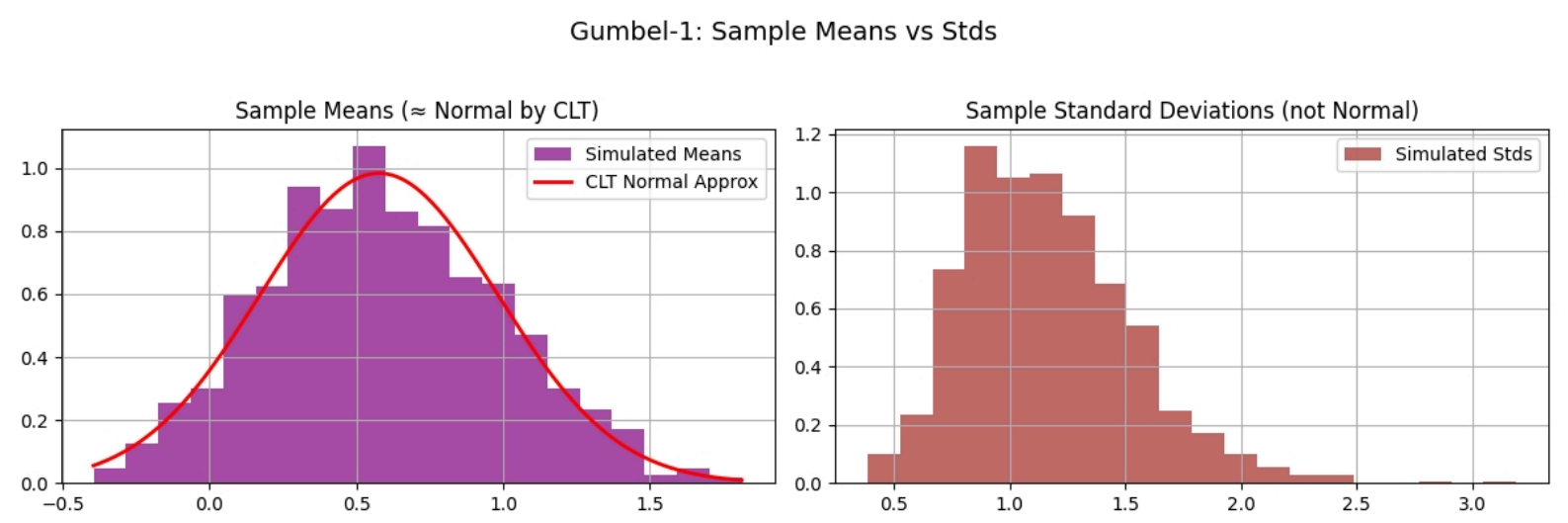

Averaging effect - Lognormal
m=1
Theo μ=1.133, Theo Var=0.365
Sim μ=1.140, Sim Var=0.359
m=2
Theo μ=1.133, Theo Var=0.182
Sim μ=1.159, Sim Var=0.190
m=10
Theo μ=1.133, Theo Var=0.036
Sim μ=1.138, Sim Var=0.034
m=100
Theo μ=1.133, Theo Var=0.004
Sim μ=1.132, Sim Var=0.004

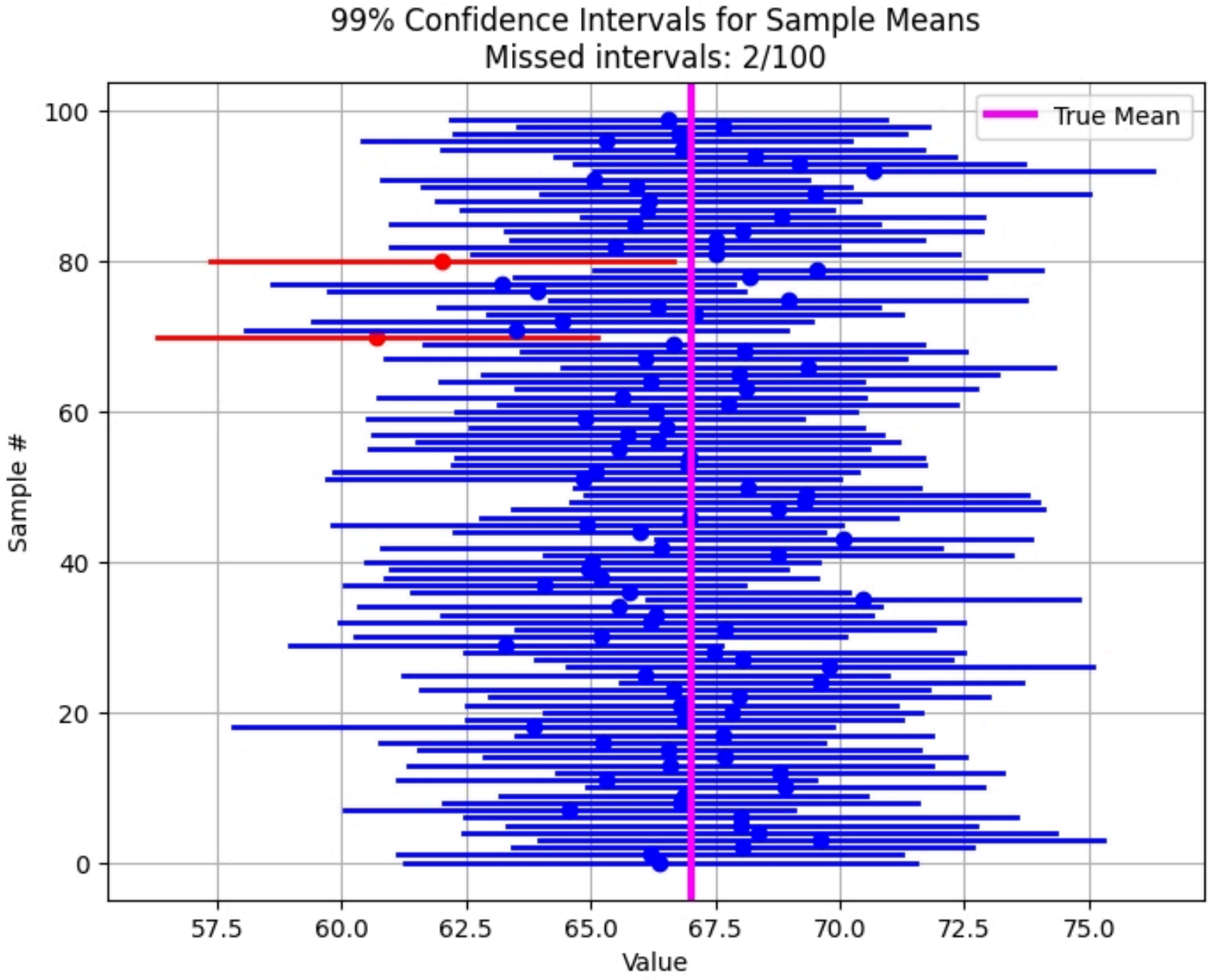

Averaging effect - Gumbel-1
m=1
Theo μ=0.577, Theo Var=1.645
Sim μ=0.565, Sim Var=1.547
m=2
Theo μ=0.577, Theo Var=0.822
Sim μ=0.644, Sim Var=0.906
m=10
Theo μ=0.577, Theo Var=0.164
Sim μ=0.580, Sim Var=0.158
m=100
Theo μ=0.577, Theo Var=0.016
Sim μ=0.578, Sim Var=0.018


Uniform: Sample Means vs Stds
Sample Means (≈ Normal by CLT)
Simulated Means
CLT Normal Approx
1.0
0.8
0.6
0.4
0.2
0.0
−1.0
−0.5
0.0
0.5
1.0
Sample Standard Deviations (not Normal)
Simulated Stds
2.0
1.5
1.0
0.5
0.0
0.6
0.8
1.0
1.2
1.4
1.6


Normal: Sample Means vs Stds
Sample Means (≈ Normal by CLT)
Simulated Means
CLT Normal Approx
Sample Standard Deviations (not Normal)
Simulated Stds


Lognormal: Sample Means vs Stds
Sample Means (≈ Normal by CLT)
Simulated Means
CLT Normal Approx
0.0
0.5
1.0
1.5
2.0
0.8
1.0
1.2
1.4
1.6
1.8
2.0
Sample Standard Deviations (not Normal)
Simulated Stds
0.0
0.5
1.0
1.5
2.0
2.5
0.5
1.0
1.5
2.0


Gumbel-1: Sample Means vs Stds
Sample Means (≈ Normal by CLT)
Simulated Means
CLT Normal Approx
Sample Standard Deviations (not Normal)
Simulated Stds


99% Confidence Intervals for Sample Means
Missed intervals: 2/100
True Mean
Sample #
Value
0
20
40
60
80
100
57.5
60.0
62.5
65.0
67.5
70.0
72.5
75.0