Human- Versus Computer-Generated Coin Toss Simulations

Analysis of 16 human-generated and 20 computer-generated simulations of 200 coin tosses. Table shows chi-square statistics for frequencies of blocks of length 3 and of length 4.

Blocks of Length 3

Chi-Square Generated By Value 3.0909 Computer 3.0909 Human Computer 3.8182 Computer 3.8182 4.3030 Computer 4.5455 Computer Human 4.5455 5.2727 Computer Computer 5.2727 5.5152 Computer Computer 6.4848 Computer 6.9697 7.2121 Computer 7.4545 Computer Computer 7.6970 Computer 8.1818 Computer 8.4242 Computer 8.9091 Computer 10.3636 Human 11.3333 Computer 11.8182 Human 13.0303 Human 16.4242 17.6364 Computer Computer 20.3030 Human 22.9697 Human 24.6667 Human 25.6363 Human 26.3636 Human 32.1818 Human 35.8182 Human 35.8182 Human 40.6666 Human 44.5455 Human 54.4848 Human 61.5152

Blocks of Length 4

Generated By	Chi-Square Value
Computer	7.6000
Computer	8.2400
Computer	9.5200
Computer	10.1600
Computer	10.1600
Human	10.1600
Computer	11.4400
Computer	11.4400
Computer	11.4400
Human	11.4400
Computer	12.0800
Computer	12.0800
Computer	14.0000
Computer	15.2800
Computer	15.2800
Human	15.9200
Computer	16.5600
Computer	16.5600
Computer	17.8400
Computer	19.1200
Computer	19.7600
Computer	21.6800
Human	22.3200
Human	26.8000
Computer	30.0000
Human	31.2800
Human	33.8400
Human	34.4800
Human	44.0800
Human	50.4800
Human	54.9600
Human	54.9600
Human	71.6000
Human	91.4400
Human	99.7600
Human	113.8400

Green: Consistent with Randomness Orange: 95% Fake Yellow: 90% Fake Red: 97.5% Fake