CLAIMS:

1. A processor-implemented method for improving computer identification, the method comprising:

transmitting, via a digital communication network, a browser fingerprinting test to one or more computing devices, the browser fingerprinting test being configured to execute via a web browser of each of the one or more computing devices;

receiving, via the digital communication network, test data from the one or more computing devices, the test data for each of the one or more computing devices including at least an elapsed processing time and a hash code;

storing the test data in a fingerprint database;

retrieving, from the fingerprint database, the elapsed processing time, the hash code for each of the one or more computing devices, and a total number of tested computing devices;

determining, via one or more processors, an average elapsed processing time based on a sum of the elapsed processing times for each computing device and the total number of tested computing devices;

determining, via one or more processors, a uniqueness level for the browser fingerprinting test by comparing the hash codes for each computing device with one another;

comparing, via the one or more processors, the average elapsed processing time to a threshold elapsed processing time value;

comparing, via the one or more processors, the uniqueness level to a threshold uniqueness level value; and

transmitting, via the digital communication network, a new browser fingerprinting test to the one or more computing devices when at least one of the uniqueness level is determined to be lower than the threshold uniqueness level value or the average elapsed processing time is determined to be greater than the threshold elapsed processing time value.

2. The method of claim 1, wherein the uniqueness level is a percentage of unique hash codes received from the total number of tested computing devices.

3. The method of claim 1 further comprising determining, via the one or more processors, a ratio between the average elapsed processing time and the uniqueness level and comparing the ratio to a threshold ratio value.

4. The method of claim 1, wherein the new browser fingerprinting test is configured to execute via the web browser of each of the one or more computing devices differently than the browser fingerprinting test.

5. A processor-readable non-transitory tangible medium storing processor-executable instructions to:

transmit a browser fingerprinting test to one or more computing devices, the browser fingerprinting test being configured to execute via a web browser of each of the one or more computing devices;

receive test data from the one more computing devices, the test data for each of the one or more computing devices including at least an elapsed processing time and a hash code;

store the test data in a fingerprint database;

retrieve, from the fingerprint database, the elapsed processing time, the hash code for each of the one or more computing devices, and a total number of tested computing devices;

determine an average elapsed processing time based on the sum of the elapsed processing times for each computing device and the total number of tested computing devices; and

determine a uniqueness level for the browser fingerprinting test by comparing the hash codes for each computing device with one another;

compare the average elapsed processing time to a threshold elapsed processing time value;

compare the uniqueness level to a threshold uniqueness level value; and

transmit a new browser fingerprinting test to the one or more computing devices when at least one of the uniqueness level is determined to be lower than the threshold uniqueness level value or the average elapsed processing time is determined to be greater than the threshold elapsed processing time value.

6. The processor-readable non-transitory tangible medium of claim 5, wherein the uniqueness level is a percentage of unique hash codes received from the total number of tested computing devices.

7. The processor-readable non-transitory tangible medium of claim 5, the processor-executable instructions further to determine a ratio between the average elapsed processing time and the uniqueness level and comparing the ratio to a threshold ratio value.

8. The processor-readable non-transitory tangible medium of claim 5, wherein the new browser fingerprinting test is configured to execute via the web browser of each of the one or more computing devices differently than the browser fingerprinting test.

9. A processor-implemented method for improving computer identification, the method comprising:

transmitting, via a digital communication network, a first browser fingerprinting test to one or more computing devices, the first browser fingerprinting test being configured to execute via a web browser of each of the one or more computing devices;

receiving, via the digital communication network, first test data for the first browser fingerprinting test from the one or more computing devices, the first test data for each of the one or more computing devices including at least an elapsed processing time and a hash code;

based on the elapsed processing time for each computing device in the first test data, determining, via one or more processors, a first average elapsed processing time for the first browser fingerprinting test;

based on the hash code for each computing device in the first test data, determining, via the one or more processors, a first uniqueness level by comparing the hash codes for each computing device in the first test data with one another;

comparing, via the one or more processors, the first average elapsed processing time to a threshold elapsed processing time value and the first uniqueness level to a threshold uniqueness level value; and

transmitting, via the digital communications network, a second browser fingerprinting test to the one or more computing devices when at least one of the first uniqueness level is determined to be lower than the threshold uniqueness level value or the first average elapsed processing time is determined to be greater than the threshold elapsed processing time value.

10. The method of claim 9, wherein the second browser fingerprinting test is configured to execute via the web browser of each of the one or more computing devices differently than the first browser fingerprinting test.

11. The method of claim 9 further comprising:

receiving, via the digital communication network, second test data for the second browser fingerprinting test from the one or more computing devices, the second test data for each of the one or more computing devices including at least an elapsed processing time and a hash code;

based on the elapsed processing time for each computing device in the second test data, determining, via one or more processors, a second average elapsed processing time for the second browser fingerprinting test; and

based on the hash code for each computing device in the second test data, determining, via the one or more processors, a second uniqueness level by comparing the hash codes for each computing device in the second test data with one another.

12. The method of claim 11 further comprising:

comparing, via the one or more processors, the first average elapsed processing time to the second average elapsed processing time; and

comparing, via the one or more processors, the first uniqueness level to the second uniqueness level.

13. The method of claim 12 further comprising deriving, via the one or more processors, a third browser fingerprinting test based on the second browser fingerprinting test when at least one of the second average elapsed processing time is less than the first average elapsed processing time or the second uniqueness level is greater than the first uniqueness level.