CLAIMS

1. A computer-implemented method comprising:

storing, by a first electronic device, first path information in a memory, the first path information comprising data representing a first path of input on a touch interface associated with the first electronic device;

communicating one or more first portions of the first path information to a second electronic device;

receiving one or more second portions of second path information from the second electronic device;

comparing the one or more second portions to the first path information; and

authenticating, by the first electronic device, the second electronic device based on similarity between the one or more second portions and the first path information,

wherein the first and second portions comprise different portions of the first and second path information, respectively.

2. The method of claim 1, further comprising establishing, in response to the authenticating, a connection between the first electronic device and the second electronic device.

3. The method of either of the preceding claims, wherein the first path information comprises coordinates for points on the first path.

4. The method of any of the preceding claims, wherein the first path information comprises a time for each point on the first path.

5. The method of any of the preceding claims, wherein points in the first path are referenced by angles and relative distances calculated based on a set of reference points.

6. The method of claim 5, wherein the set of reference points are a start point and end point of the first path.

7. The method of any of the preceding claims, wherein the communicating the one or more first portions to the second electronic device occurs in response to the authenticating the second electronic device.

8. The method of any of the preceding claims, wherein the second set of portions do not overlap with the first set of portions.

9. The method of claim 3, further comprising communicating a total number of points in the first path information to the second electronic device.

10. The method of any of the preceding claims, further comprising:

receiving a total number of points in the second path information from the second electronic device;

comparing the total number of points in the second path information to a total number of points in the first path information; and

based on a difference between the total number of points in the second path information and the total number of points in the first path information, using a curve fitting algorithm to generate missing data points.

11. The method of any of the preceding claims, wherein the touch interface is a touchscreen.

12. A system comprising:

one or more processors; and

a computer readable storage medium communicatively coupled to the one or more processors, the computer readable storage medium containing program instructions executable by the one or more processors to cause the one or more processors to perform a method comprising:

storing, by a first electronic device, first path information in a memory, the first path information comprising data representing a first path of input on a touch interface associated with the first electronic device;

communicating one or more first portions of the first path information to a second electronic device;

receiving one or more second portions of second path information from the second electronic device;

comparing the one or more second portions to the first path information; and

authenticating, by the first electronic device, the second electronic device based on similarity between the one or more second portions and the first path information,

wherein the first and second portions comprise different portion of the first and second path information, respectively.

13. The system of claim 12, wherein the method further comprises establishing, in response to the authenticating, a connection between the first electronic device and the second electronic device.

14. The system of either of claims 12 or 13, wherein the first path information comprises coordinates for points on the first path.

15. The system of any of claims 12 to 14, wherein the first path information further comprises a time for each point on the first path.

16. The system of any of claims 12 to 15, wherein points in the first path are referenced by angles and relative distances calculated based on a set of reference points.

17. A computer program product for authentication of devices using touch interfaces, the computer program product comprising: a computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing the method according to any of claims 1 to 11.

18. A computer program stored on a computer readable medium and loadable into an internal memory of a digital computer, comprising software code portions, when said program is run on a computer, for performing the method of any of claims 1 to 11.