CLAIMS:

1. A method, comprising:

receiving, by a processor, a motion-enabled transaction request from a user computing device comprising an air sign input,

wherein the air sign input comprises accelerometer tracked data associated with motion and velocity of a unique movement of the user computing device, wherein the unique movement simulates a shape of an air sign symbol, and wherein the air sign symbol is enacted by a user while holding the user computing device;

inputting, by the processor, the received air sign input into a trained neural network model to determine a stored air sign symbol associated with the air sign symbol comprised in the air sign input;

retrieving, by the processor, a merchant identifier, a transaction type, and a transaction cost based on the determined stored air sign symbol; and

transmitting, by the processor, to the user computing device a transaction confirmation comprising the merchant identifier, the transaction type, and the transaction cost in response to the determined stored air sign symbol.

2. The method of claim 1, further comprising preprocessing, by the processor, the air sign input by at least one of filtering or normalizing the air sign input.

3. The method of claim 1, further comprising receiving, by the processor, a second air sign input based on the transaction confirmation.

4. The method of claim 1, further comprising transmitting, by the processor, a transaction authorization request to a payment network, wherein the transaction authorization request comprises a user identifier and the transaction cost, and wherein the payment network authorizes the transaction authorization request to approve the motion-enabled transaction request.

5. The method of claim 4, further comprising transmitting, by the processor, a transaction approval notification to complete the motion-enabled transaction request.

6. The method of claim 1, wherein the air sign input is generated by a merchant device, and wherein the merchant device generates the air sign input by capturing a user gesture.

7. The method of claim 1, wherein the motion-enabled transaction request comprises GPS location data, and wherein the merchant identifier is determined based on the stored air sign symbol and the GPS location data.

8. A system comprising:

a processor; and

a tangible, non-transitory memory configured to communicate with the processor, the tangible, non-transitory memory having instructions stored thereon that, in response to execution by the processor, cause the processor to perform operations comprising:

receiving, by the processor, a motion-enabled transaction request from a user computing device comprising an air sign input,

wherein the air sign input comprises accelerometer tracked data associated with motion and velocity of a unique movement of the user computing device and the unique movement simulates a shape of an air sign symbol, and wherein the air sign symbol is enacted by a user while holding the user computing device;

inputting, by the processor, the received air sign input into a trained neural network model to determine a stored air sign symbol;

retrieving, by the processor, a merchant identifier, a transaction type, and a transaction cost based on the determined stored air sign symbol; and

transmitting, by the processor, to the user computing device a transaction confirmation comprising the merchant identifier, the transaction type, and the transaction cost in response to the determined stored air sign symbol.

9. The system of claim 8, further comprising preprocessing, by the processor, the air sign input by at least one of filtering or normalizing the air sign input.

10. The system of claim 8, further comprising receiving, by the processor, a second air sign input based on the transaction confirmation.

11. The system of claim 8, further comprising:

transmitting, by the processor, a transaction authorization request to a payment network, wherein the transaction authorization request comprises a user identifier and the transaction cost, and wherein the payment network authorizes the transaction authorization request to approve the motion-enabled transaction request; and

transmitting, by the processor, a transaction approval notification to complete the motion-enabled transaction request.

12. The system of claim 8, wherein the air sign input is generated by a merchant device, and wherein the merchant device generates the air sign input by capturing a user gesture.

13. The system of claim 8, wherein the motion-enabled transaction request comprises GPS location data, and wherein the merchant identifier is determined based on the stored air sign symbol and the GPS location data.

14. An article of manufacture including a non-transitory, tangible computer readable storage medium having instructions stored thereon that, in response to execution by a computer-based system, cause the computer-based system to perform operations comprising:

receiving, by the computer-based system, a motion-enabled transaction request from a user computing device comprising an air sign input,

wherein the air sign input comprises accelerometer tracked data associated with motion and velocity of a unique movement of the user computing device and the unique movement simulates a shape of an air sign symbol, and wherein the air sign symbol is enacted by a user while holding the user computing device;

inputting, by the computer-based system, the received air sign input into a trained neural network model to determine a stored air sign symbol;

retrieving, by the computer-based system, a merchant identifier, a transaction type, and a transaction cost based on the determined stored air sign symbol; and

transmitting, by the computer-based system, to the user computing device a transaction confirmation comprising the merchant identifier, the transaction type, and the transaction cost in response to the determined stored air sign symbol.

15. The article of manufacture of claim 14, further comprising preprocessing, by the computer-based system, the air sign input by at least one of filtering or normalizing the air sign input.

16. The article of manufacture of claim 14, further comprising receiving, by the computer-based system, a second air sign input based on the transaction confirmation.

17. The article of manufacture of claim 14, further comprising:

transmitting by the computer-based system, a transaction authorization request to a payment network, wherein the transaction authorization request comprises a user identifier and the transaction cost, and wherein the payment network authorizes the transaction authorization request to approve the motion-enabled transaction request; and

transmitting, by the computer-based system, a transaction approval notification to complete the motion-enabled transaction request.