CLAIMS:

1. A sensor wall placing Unmanned Aerial Vehicle (UAV) comprising:

a UAV frame;

a plurality of motors connected to the UAV frame and capable of lifting and maneuvering the sensor wall placing UAV;

a mounting mechanism configured to detachably attach, via an interface, a sensor casing comprising at least one sensor, during flight of the sensor wall placing UAV, the mounting mechanism being connected to a top part of the sensor wall placing UAV so that the mounting mechanism is facing upwards from the top part of the sensor wall placing UAV, and upon detachably attaching the sensor casing to the mounting mechanism, a face of the sensor casing faces upwards and away from the sensor wall placing UAV thereby enabling the sensor wall placing UAV to perform a maneuver that results in direct contact between the face of the sensor casing and a target wall; and

a processing resource configured to:

fly, using the motors, the sensor wall placing UAV to a target spatial disposition with respect to the target wall on which the sensor is to be placed;

upon reaching the target spatial disposition, perform ~~a~~the maneuver of the sensor wall placing UAV, so that the face of the sensor casing is in direct contact with the target wall; and

activate the motors in a direction that generates a thrust of the sensor wall placing UAV towards the target wall for at least a given time period, thereby enabling adhesion of the sensor casing to the target wall when the sensor casing is covered with adhesive.

2. The sensor wall placing UAV of claim 1, wherein the mounting mechanism is connected to the sensor wall placing UAV via a movable joint.

3. The sensor wall placing UAV of claim 2, wherein the interface is releasable and wherein the processing resource is further configured to:

turn off the motors after the given time period, thereby stopping the thrust towards the target wall, wherein upon turning off the motors, the sensor wall placing UAV assumes a placement with respect to the target wall as allowed by the movable joint; and

release the interface, thereby disconnecting the sensor casing from the sensor wall placing UAV, thereby leaving the sensor casing adhered by the adhesive to the target wall.

4. The sensor wall placing UAV of claim 3, wherein the ~~placement with respect to the target wall is in an angle between 30-150 degrees.~~

~~5. The sensor wall placing UAV of claim 3, wherein the~~ processing resource is further configured to activate the motors, upon the release, to fly the sensor wall placing UAV to a next location.

~~6~~5. The sensor wall placing UAV according to ~~any of claims~~claim 1~~-5~~, wherein the adhesive is covered with a liner, and wherein the sensor wall placing UAV further comprises a liner removal mechanism, configured to remove the liner before performance of the maneuver.

~~7~~6. The sensor wall placing UAV according to ~~any of claims~~claim 1~~-6~~, wherein the processing resource is configured to perform the maneuver upon a maneuver trigger, wherein the maneuver trigger includes one of:

a. a proximity sensor of the sensor wall placing UAV indicates that the sensor wall placing UAV is at a given distance from the target wall;

b. an accelerometer of the sensor wall placing UAV indicates that the sensor wall placing UAV made contact with the target wall; or

c. a touch sensor indicates that a part of the wall placing UAV on which the touch sensor is placed made contact with the target wall.

~~8~~7. The sensor wall placing UAV according to ~~any of claims~~claim 1~~-7~~, wherein the UAV is a quadcopter equipped with four rotors, each of the rotors controlled by a respective motor of the motors, and wherein the maneuver is performed by: (a) causing a pair of the rotors that are farther from the target wall to rotate at a different speed than another pair of rotors that are closer to the target wall thereby changing an angle of the UAV with respect to the target wall, and (b) increasing a rotation speed of the four rotors to generate acceleration towards the target wall, thereby causing the UAV to push itself onto the target wall.

~~9~~8. The sensor wall placing UAV according to ~~any of claims~~claim 1~~-8~~, wherein the target spatial disposition is defined by a given position from the target wall and a given orientation of the sensor wall placing UAV with respect to the target wall.

~~10~~9. The sensor wall placing UAV of claim ~~9~~8, wherein the sensor wall placing UAV further comprises one or more distance determination sensors, including one or more of:

d. a Li~~l~~ght Detection And Ranging (LIDAR);
e. a proximity sensor;
f. a sonar;
g. a Time Of Flight (TOF) camera; or
h. an Infra-Red (IR) sensor.

~~11~~10. The sensor wall placing UAV of claim ~~10~~9, wherein the processing resource is further configured to determine a current spatial disposition of the sensor wall placing UAV with respect to the target wall based on a plurality of readings obtained by the distance determination sensors, wherein a first reading is obtained from a first orientation of the distance determination sensors with respect to the target wall and a second reading is obtained from a second orientation of the distance determination sensors with respect to the target wall.

~~12~~11. A method of operating a sensor wall placing Unmanned Aerial Vehicle (UAV), the ~~sensor wall placing UAV having:~~method comprising:

~~a UAV frame;~~

flying, using a plurality of motors connected to ~~the~~a UAV frame of the sensor wall placing UAV and capable of lifting and maneuvering the sensor wall placing UAV~~; and~~

, the sensor wall placing UAV to a target spatial disposition with respect to a target wall on which at least one sensor is to be placed, wherein the sensor wall placing UAV having a mounting mechanism configured to detachably attach, via an interface, a sensor casing comprising the at least one sensor, during flight of the sensor wall placing UAV, the mounting mechanism being connected to the sensor wall placing UAV so that the mounting mechanism is facing away from a top part of the sensor wall placing UAV, and upon detachably attaching the sensor casing to the mounting mechanism, a face of the sensor casing faces upwards and away from the sensor wall placing UAV thereby enabling the sensor wall placing UAV to perform a maneuver that results in direct contact between the face of the sensor casing and ~~a~~the target wall;

~~the method comprising:~~

~~flying, using the motors, the sensor wall placing UAV to a target spatial disposition with respect to the target wall on which the sensor is to be placed;~~

upon reaching the target spatial disposition, performing ~~a~~the maneuver of the sensor wall placing UAV, so that the face of the sensor casing is in direct contact with the target wall; and

activating the motors in a direction that generates a thrust of the sensor wall placing UAV towards the target wall for at least a given time period, thereby enabling adhesion of the sensor casing to the target wall when the sensor casing is covered with adhesive.

~~13~~12. The method of claim ~~12~~11, wherein the mounting mechanism is connected to the sensor wall placing UAV via a movable joint.

~~14~~

13. The method of claim ~~13~~12, wherein the interface is releasable and wherein the method further comprises:

turning off the motors after the given time period, thereby stopping the thrust towards the target wall, wherein upon turning off the motors, the sensor wall placing UAV assumes a placement with respect to the target wall as allowed by the movable joint; and

releasing the interface, thereby disconnecting the sensor casing from the sensor wall placing UAV, thereby leaving the sensor casing adhered by the adhesive to the target wall.

~~15~~14. The method of claim ~~14, wherein the placement with respect to the target wall is in an angle between 30-150 degrees.~~

~~16. The method of claim 14~~13, further comprising activating the motors, upon the releasing, to fly the sensor wall placing UAV to a next location.

~~17~~15. The method according to ~~any of claims 12-16~~claim 11, wherein the adhesive is covered with a liner, and wherein the method further comprises removing the liner, using a liner removal mechanism, before performance of the maneuver.

~~18~~16. The method according to ~~any of claims 12-17~~claim 11, wherein the maneuver is performed upon a maneuver trigger, wherein the maneuver trigger includes one of:

i. a proximity sensor of the sensor wall placing UAV indicates that the sensor wall placing UAV is at a given distance from the target wall;

j. an accelerometer of the sensor wall placing UAV indicates that the sensor wall placing UAV made contact with the target wall; or

k. a touch sensor indicates that a part of the wall placing UAV on which the touch sensor is placed made contact with the target wall.

~~19~~17. The method according to ~~any of claims 12-18~~claim 11, wherein the UAV is a quadcopter equipped with four rotors, each of the rotors controlled by a respective motor of the motors, and wherein the maneuver is performed by: (a) causing a pair of the rotors that are farther from the target wall to rotate at a different speed than another pair of rotors that are closer to the target wall thereby changing an angle of the UAV with respect to the target wall, and (b) increasing a rotation speed of the rotors to generate acceleration towards the target wall, thereby causing the UAV to push itself onto the target wall.

~~20~~18. The method according to ~~any of claims 12-19~~claim 11, wherein the target spatial disposition is defined by a given position from the target wall and a given orientation of the sensor wall placing UAV with respect to the target wall.

~~21~~19. The method of claim ~~20~~11, wherein the sensor wall placing UAV further comprises one or more distance determination sensors, ~~including one or more of:~~

~~l. a LIght Detection And Ranging (LIDAR);~~

~~m. a proximity sensor;~~

~~n. a sonar;~~

~~o. a Time Of Flight (TOF) camera; or~~

~~p. an Infra-Red (IR) sensor.~~

~~22. The~~and wherein the method ~~of claim 21,~~ further comprising determining a current spatial disposition of the sensor wall placing UAV with respect to the target wall based on a plurality of readings obtained by the distance determination sensors, wherein a first reading is obtained from a first orientation of the distance determination sensors with respect to the target wall and a second reading is obtained from a second orientation of the distance determination sensors with respect to the target wall.

~~23~~20. A non-transitory computer readable storage medium having computer readable program code embodied therewith, the computer readable program code, executable by a processing resource of a computer to perform a method ~~of operating a sensor wall placing Unmanned Aerial Vehicle (UAV), the sensor wall placing UAV having:~~, the method comprising:

~~a UAV frame;~~

flying, using a plurality of motors connected to ~~the~~a UAV frame of the sensor wall placing UAV and capable of lifting and maneuvering the sensor wall placing UAV~~; and~~

, the sensor wall placing UAV to a target spatial disposition with respect to a target wall on which at least one sensor is to be placed, wherein the sensor wall placing UAV having a mounting mechanism configured to detachably attach, via an interface, a sensor casing comprising the at least one sensor, during flight of the sensor wall placing UAV, the mounting mechanism being connected to the sensor wall placing UAV so that the mounting mechanism is facing away from a top part of the sensor wall placing UAV, and upon detachably attaching the sensor casing to the mounting mechanism, a face of the sensor casing faces upwards and away from the sensor wall placing UAV thereby enabling the sensor wall placing UAV to perform a maneuver that results in direct contact between the face of the sensor casing and ~~a~~the target wall;

~~the method comprising:~~

~~flying, using the motors, the sensor wall placing UAV to a target spatial disposition with respect to the target wall on which the sensor is to be placed;~~

upon reaching the target spatial disposition, performing ~~a~~the maneuver of the sensor wall placing UAV, so that the face of the sensor casing is in direct contact with the target wall; and

activating the motors in a direction that generates a thrust of the sensor wall placing UAV towards the target wall for at least a given time period, thereby enabling adhesion of the sensor casing to the target wall when the sensor casing is covered with adhesive.