the speed at which data captured by the sensors and/or actuators can be processed. Due to the controller devices being engaged in processing raw data from sensors and/or actuators, their availability to capture sensor and/or actuator data is low, which, in turn limits the throughput of raw data available from the sensors and/or actuators. Further, continuous processing of raw data increases power consumption by the controller devices. Accordingly, conventional deployment of sensors and/or actuators suffers from several disadvantages.

**[0004]** As the “Internet of Things (IoT)” grows, more and more controller devices with sensors and/or actuators interconnect with one another and/or to the Internet. Groups of such devices may communicate with one another and/or to a gateway such that the gateway becomes a proxy for the Internet communications for such group of devices, also called “edge devices”. The edge devices may communicate through one or more gateways, or directly as independent devices. The combined complexity of such systems may further introduce delays in addition to delays due the speed constraints as discussed above. Further, any updates required in the sensors and/or actuators would require updating each sensor individually, which may be excessively time consuming or otherwise difficult to implement. Therefore, conventional deployment of sensors and/or actuators in current technology scenarios limits the utilization of the current technology and the sensors and/or actuators.

**[0005]** Thus, there is a need in the art for techniques that significantly improve the constrained performance of controller devices coupled to, or a part of sensors and/or actuators.

## SUMMARY OF THE INVENTION

**[0006]** Embodiments of the present invention generally relate to a method and apparatus for sensor and/or actuator data processing on a server, substantially as shown in and/or described in connection with at least one of the figures, as set forth more completely in the claims.

**[0006a]** According to a first aspect of the present invention, there is provided a computer-implemented method for processing data from at least one of a sensor or an actuator on a server, including: receiving, on a server, raw data from at least one of a sensor or an actuator; receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device, or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server; and processing the raw data on the server according to a predefined algorithm, wherein the server is remote to the at least of the sensor or the actuator.

**[0006b]** According to a second aspect of the present invention, there is provided a system for processing data from at least one of a sensor or an actuator on a server, including: at least one of a sensor or an actuator; a server coupled to the at least one sensor or the actuator, the server comprising at least one processor and a memory comprising executable instructions, which when executed using the at least one processor implements a method including: receiving, on the server, raw data from the at least one of a sensor or an actuator, receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server, and processing the raw data on the server according to a predefined algorithm, wherein the server is remote to the at least one of the sensor or the actuator; and a user device for defining the algorithm via a graphical user interface (GUI) on the user device, the user device remote to the at least one of the sensor or the actuator and the server.

**[0006c]** According to a third aspect of the present invention, there is provided an apparatus for processing data from at least one of a sensor or an actuator on a server, including: a server comprising at least one processor and a memory comprising executable instructions, which when executed using the at least one processor implements a method comprising: receiving, on the server, raw data from at least one of a sensor or an actuator, receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server, and processing the raw data on the server according to the algorithm, wherein the server is remote to the at least one of the sensor or the actuator.

**CLAIMS:**

1. A computer-implemented method for processing data from at least one of a sensor or an actuator on a server, comprising:

receiving, on a server, raw data from at least one of a sensor or an actuator;

receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device, or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server; and

processing the raw data on the server according to a predefined algorithm, wherein the server is remote to the at least of the sensor or the actuator.

2. The method of claim 1, wherein the server is located on at least one of premises comprising the at least one of the sensor or the actuator, in the cloud, in the fog, or on a gateway coupled to the at least one of the sensor or the actuator, and wherein the processed data is archived, displayed, or communicated for consumption.

3. The method of claim 1 further comprising:

conducting on the processed data, at least one of analytics, database storage, or presentation via a visual interface.

4. The method of claim 1 further comprising:

defining, at a user device, connection parameters for communicably coupling the at least one of the sensor or the actuator to the server, the connections are defined via at least one of a graphical user interface (GUI) or a file definition, wherein the user device is remote to the server.

5. The method of claim 1, further comprising converting the raw data according to a pre-defined conversion formula comprised in the algorithm, wherein the pre-defined conversion formula is defined using at least one of a graphical user interface (GUI) or a file definition.

6. The method of claim 1, wherein the algorithm comprises at least one of conversion algorithms including conversion formulae, data quality check algorithms, or data cleaning algorithms.

7. A system for processing data from at least one of a sensor or an actuator on a server, comprising:

at least one of a sensor or an actuator;

a server coupled to the at least one sensor or the actuator, the server comprising at least one processor and a memory comprising executable instructions, which when executed using the at least one processor implements a method comprising:

receiving, on the server, raw data from the at least one of a sensor or an actuator,

receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server, and

processing the raw data on the server according to a predefined algorithm, wherein the server is remote to the at least one of the sensor or the actuator; and

a user device for defining the algorithm via a graphical user interface (GUI) on the user device, the user device remote to the at least one of the sensor or the actuator and the server.

8. An apparatus for processing data from at least one of a sensor or an actuator on a server, comprising:

a server comprising at least one processor and a memory comprising executable instructions, which when executed using the at least one processor implements a method comprising:

receiving, on the server, raw data from at least one of a sensor or an actuator;

receiving, on the server, an algorithm from a user device, wherein the algorithm is defined via a graphical user interface (GUI) on the user device or wherein the algorithm is defined via a file definition selected at the GUI, and the user device is remote to the at least one of the sensor or the actuator and the server; and

processing the raw data on the server according to a predefined algorithm, wherein the server is remote to the at least one of the sensor or the actuator.

9. The apparatus of claim 8, wherein the server is located on at least one of premises comprising the at least one of the sensor or the actuator, in the cloud, in the fog, or on a gateway coupled to the at least one of the sensor or the actuator, and wherein the processed data is archived, displayed, or communicated for consumption.

10. The apparatus of claim 8, wherein the method further comprises conducting on the processed data, at least one of analytics, database storage, or presentation via a visual interface.

11. The apparatus of claim 8, wherein the method further comprises defining, at a user device, connection parameters for communicably coupling the at least one of the sensor or the actuator to the server, the connections are defined via at least one of a graphical user interface (GUI) or a file definition, wherein the user device is remote to the server.

12. The apparatus of claim 8, wherein the method further comprises converting the raw data according to a pre-defined conversion formula comprised in the algorithm, wherein the pre-defined conversion formula is defined using at least one of a graphical user interface (GUI) or a file definition.

13. The apparatus of claim 8, wherein the algorithm comprises at least one of conversion algorithms including conversion formulae, data quality check algorithms, or data cleaning algorithms.