What is claimed is:

1. A method comprising:

receiving a first time-dependent data characterizing measurement by a first sensor operatively coupled to an oil and gas industrial machine;

calculating, from the first time-dependent data, a first value of an operating characteristic of the oil and gas industrial machine over a time period;

receiving a second value of the operating characteristic detected at the oil and gas industrial machine;

determining a first anomaly score associated with a first portion of the first time-dependent data over thea time period, the determination is based on thea first value of ~~an operating characteristic over the time period~~ and thea second value; and ~~of the operating characteristic over the time period,~~

~~wherein the first value of the operating characteristic is calculated from the first time-dependent data and the second value of the operating characteristic is detected at the oil and gas industrial machine; and~~

rendering, in a graphical user interface display space, a visual representation indicative of the first anomaly score;

receiving a second time-dependent data characterizing measurement by a second sensor operatively coupled to the oil and gas industrial machine;

calculating, from the second time-dependent data, a third value of the operating characteristic over the time period;

receiving a fourth value of the operating characteristic detected at the oil and gas industrial machine;

determining a second anomaly score associated with a first portion of the second time-dependent data over the time period, the determination is based on the third value and the fourth value; and

determining a modified anomaly score based on the first anomaly score and the second anomaly score.

2. The method of claim 1, wherein determining the first anomaly score includes calculating a difference between the first value of the operating characteristic and the second value of the operating characteristic and comparing the difference with a predetermined threshold value.

3. The method of claim 1 further comprising determining a first predictive model of the first sensor based on historical data associated with the first sensor.

4. The method of claim 3, wherein determining the first predictive model includes

determining one or more coefficients of a characteristic equation associated with the oil and gas industrial machines based on the historical data, the characteristic equation configured to receive the first time-dependent data as an input and generate the first anomaly score.

5. The method of claim 3, wherein the first predictive model calculates the first value of the operating characteristic from the time-dependent data characterizing measurement by the first sensor.

6. The method of claim 1, wherein the graphical user interface display space includes a first interactive object and a second interactive object, the first interactive object configured to receive a first user input, and the second interactive object configured to receive a second

user input.

7. The method of claim 6, wherein the determining of the first predictive model is performed based on the first user input.

8. The method of claim 6, wherein the receiving of time-dependent data characterizing measurement by a first sensor, the determining of the first anomaly score and the rendering of the visual representation are performed based on the second user input.

9. ~~The method of claim 1, further includes:~~

~~receiving a second time-dependent data characterizing measurement by a second sensor operatively coupled to the oil and gas industrial machine;~~

~~determining a second anomaly score associated with a first portion of the second time-dependent data over the time period, the determination is based on a third value of the operating characteristic over the time period and a fourth value of the operating characteristic over the time period,~~

~~wherein the third value of the operating characteristic is calculated from the received time-dependent data characterizing measurement by the second sensor and the second value of the operating characteristic is detected at the oil and gas industrial machine; and~~

~~determining a modified anomaly score based on the first anomaly score and the second anomaly score~~A system comprising: at least one data processor; memory coupled to the at least one data processor, the memory storing instructions to cause the at least one data processor to perform operations comprising: receiving a first time-dependent data characterizing measurement by a first sensor operatively coupled to an oil and gas industrial machine; calculating, from the first time-dependent data, a first value of an operating characteristic of the oil and gas industrial machine over a time period; receiving a second value of the operating characteristic detected at the oil and gas industrial machine; determining a first anomaly score associated with a first portion of the first time-dependent data over the time period, the determination is based on the first value and the second value ; rendering, in a graphical user interface display space, a visual representation indicative of the first anomaly score; receiving a second time-dependent data characterizing measurement by a second sensor operatively coupled to the oil and gas industrial machine; calculating, from the

second time-dependent data, a third value of the operating characteristic over the time period; receiving a fourth value of the operating characteristic detected at the oil and gas industrial machine; determining a second anomaly score associated with a first portion of the second time-dependent data over the time period, the determination is based on the third value and the fourth value; and determining a modified anomaly score based on the first anomaly score and the second anomaly score.

10. ~~A system comprising:~~

~~at least one data processor;~~

~~memory coupled to the at least one data processor, the memory storing instructions to cause the at least one data processor to perform operations comprising:~~

~~receiving a first time-dependent data characterizing measurement by a first sensor operatively coupled to an oil and gas industrial machine;~~

~~determining a first anomaly score associated with a first portion of the first time-dependent data over a time period, the determination is based on a first value of an operating characteristic over the time period and a second value of the operating characteristic over the time period,~~

~~wherein the first value of the operating characteristic is calculated from the first time-~~

~~dependent data and the second value of the operating characteristic is detected at the oil and gas industrial machine; and~~

~~rendering, in a graphical user interface display space, a visual representation indicative of the first anomaly score~~The system of claim 9, wherein determining the first anomaly score includes calculating a difference between the first value of the operating characteristic and the second value of the operating characteristic and comparing the difference with a predetermined threshold value.

11. ~~The system of claim 10, wherein determining the first anomaly score includes calculating a difference between the first value of the operating characteristic and the second value of the operating characteristic and comparing the difference with a predetermined threshold value~~The system of claim 9, wherein the operations further comprising determining a first predictive model of the first sensor based on historical data associated with the first sensor.

12. ~~The system of claim 10, wherein the operations further comprising determining a first predictive model of the first sensor based on historical data associated with the first sensor~~The system of claim 11, wherein determining the first predictive model includes determining one or more coefficients of a characteristic equation associated with the oil and gas industrial machines based on the historical data, the characteristic equation configured to receive the first timedependent data as an input and generate the first anomaly score.

13. ~~The system of claim 12, wherein determining the first predictive model includes determining one or more coefficients of a characteristic equation associated with the oil and gas industrial machines based on the historical data, the characteristic equation configured to receive the first time-dependent data as an input and generate the first anomaly score~~The system of claim 11, wherein the first predictive model calculates the first value of the operating characteristic from the time-dependent data characterizing measurement by the first sensor.

14. ~~The system of claim 12, wherein the first predictive model calculates the first value of the operating characteristic from the time-dependent data characterizing measurement by the first sensor~~The system of claim 9, wherein the graphical user interface display space includes a first interactive object and a second interactive object, the first interactive object configured

to receive a first user input, and the second interactive object configured to receive a second user input.

15. ~~The system of claim 10, wherein the graphical user interface display space includes a first interactive object and a second interactive object, the first interactive object configured to receive a first user input, and the second interactive object configured to receive a second user input~~The system of claim 14, wherein the determining of the first predictive model is performed based on the first user input.

16. ~~The system of claim 15, wherein the determining of the first predictive model is performed based on the first user input~~The system of claim 14, wherein the receiving of time-dependent data characterizing measurement by a first sensor, the determining of the first anomaly score and the rendering of the visual representation are performed based on the second user input.

~~17. The system of claim 15, wherein the receiving of time-dependent data characterizing measurement by a first sensor, the determining of the first anomaly score and the rendering of the visual representation are performed based on the second user input.~~

~~18. The system of claim 10, wherein the operations further comprising:~~

receiving a second time-dependent data characterizing measurement by a second sensor operatively coupled to the oil and gas industrial machine;

determining a second anomaly score associated with a first portion of the second time-dependent data over the time period, the determination is based on a third value of the operating characteristic over the time period and a fourth value of the operating characteristic over the time period,

wherein the third value of the operating characteristic is calculated from the received time-dependent data characterizing measurement by the second sensor and the second value of the operating characteristic is detected at the oil and gas industrial machine; and

determining a modified anomaly score based on the first anomaly score and the second anomaly score.