## CLAIMS

What is claimed is:

1. A computer-implemented method comprising:

identifying, by one or more processors, data sources, the data sources being configured to provide sensor data and timestamping of the sensor data as a first set of one or more time series, the sensor data comprising values of a first group of measurands;

determining, by one or more processors, that values of a second group of one or more of the measurands of a subset of the sensor data indicatesindicate an anomaly, wherein the subset of the sensor data is provided by a given data source of the data sources, and covering a time window,wherein the given data source comprises a set of components;

determining, by one or more processors, a third group of one or more of the measurands that are root cause as candidates for identifying a root cause of the anomaly using a set of one or more similarity techniques for comparing values of the second group of measurands and the third group of measurands in the time window, wherein the measurands of the third group are provided by the set of components;

for each similarity technique of the set of similarity techniques and for each measurand of the second group, assigning, by one or more processors, a set respective sets of coefficients to the measurandmeasurands of the second group, wherein each coefficient of the setrespective sets of coefficients is indicative of a comparison result of the eacha measurand of the second group with a measurand of the third group using thea similarity technique of a set of similarity techniques;

determining, by one or more processors, using the sets of coefficients, whether a specific subset of the set of components of the given data source can be identified as a root cause of the anomaly; and

in response to determining that the specific subset of the set of components of the given data source can be identified as the root cause of the anomaly, providing, by one or more processors, the specific subset of components as the root cause of the anomaly.

2. The method of claim 1, further comprising:

~~in response to~~ determining that no specific subset of the set of components of the given data source can be identified as a root cause of the anomaly~~,~~ using the respective sets of coefficients;

updating~~, by one or more processors,~~ the third group of measurands;

~~for each similarity technique of the set of similarity techniques and for each measurand of the second group,~~ assigning~~, by one or more processors, an~~ respective sets of updated ~~set of~~ coefficients to the ~~measurand, wherein each coefficient of~~measurands of the second group, based, at least in part, on the updated ~~set of~~ third group; and

identifying a specific subset of the set of components of the given data source as the root cause of the anomaly using the respective sets of updated coefficients ~~is indicative of the comparison result of the each measurand with a measurand of the updated third group using the similarity technique; and~~.

~~determining, by one or more processors, using the updated sets of coefficients, whether the specific subset of the set of components of the given data source can be identified as the root cause of the anomaly.~~

~~3.~~

2. The computer-implemented method of claim ~~2~~1, wherein the updating of the third group of measurands ~~further~~ comprises ~~an action selected~~ :

removing one or more measurands from the third group ~~consisting of:~~ ; and

~~removing, by one or more processors,~~adding one or more measurands ~~from~~to the third group~~; and~~.

~~adding, by one or more processors,~~

3. The computer-implemented method of claim 2, wherein the added one or more measurands ~~to the third group.~~

~~4. The method of claim 3, wherein the removed or added measurands~~ are provided by a selected component of the set of components, and wherein the computer-implemented method further ~~comprising:~~ comprises:

~~excluding~~, ~~by one or more processors,~~ the selected component from the set of components for a next iteration.

~~5.~~ ~~4.~~ The computer-implemented method of claim ~~4~~3, further comprising:

~~ranking, by one or more processors,~~ the set of components in accordance with a predefined property of the set of components and in a monotonic sorting order, wherein the selected component is a first ranked component.

~~6.~~ 5. The computer-implemented method of claim ~~5~~4, wherein the property is an overload degree.

~~7. The~~6. The computer-implemented method of claim 1, wherein the specific subset of the set of components is a single component of the set of components.

~~8. The~~7. The computer-implemented method of claim 1, wherein the determining ~~whether a~~that no specific subset of the set of components of the given data source can be identified as ~~a~~the root cause of the anomaly further comprises:

~~for each measurand~~respective measurands of the second group ~~and for each measurand of the third group~~, combining~~, by one or more processors,~~ the respective ~~set~~sets of coefficients, resulting in a set of combined ~~coefficient~~coefficients; and

~~determining whether the~~that no specific subset of the set of components of the given data source can be identified as ~~a~~the root cause of the anomaly using the combined coefficients.

~~9.~~ 8. The computer-implemented method of claim ~~8~~7, wherein combining the ~~set~~respective sets of coefficients includes summing the ~~set~~respective sets of coefficients.

~~10.~~ 9. The computer-implemented method of claim 1, further comprising:

~~normalizing, by one or more processors, in the time window,~~ values of measurands of the second group of measurands and the third ~~groups~~group of measurands prior to comparing the values of the second group of measurands and the third group of measurands ~~in the time window~~.

~~11. The~~10. The computer-implemented method of claim 1, wherein the set of similarity techniques includes a Manhattan distance, a Euclidean distance, a Dynamic time warping (DTW) distance, a Spearman metric, and a Pearson ~~metrics~~metric.

~~12.~~ 11. The computer-implemented method of claim 1, wherein ~~determining that values of a second group of one or more of the measurands of a~~the identifying the specific subset of the ~~sensor data indicates an~~ set of components of the given data source as the root cause of the anomaly further comprises:

~~receiving, by one or more processors,~~ receiving an event ticket from the given data source, the event ticket indicative of the anomaly.

~~13.~~ 12. The computer-implemented method of claim 1, wherein ~~determining that values of a second group of one or more of the measurands of a~~ the identifying the specific subset of the ~~sensor~~set of components of the given data ~~indicates an~~ source as the root cause of the anomaly initiates in response to receiving an event ticket.

~~14. The~~13. The computer-implemented method of claim 1, wherein a measurand of the second group comprises a measurand selected from the group consisting of (i) a measurand of the first group ~~of measurands~~ and (ii) a combination of measurands of the first group.

~~15. The~~14. The computer-implemented method of claim 1, wherein each time series of the first set of time series includes values of a respective measurand.

15.

~~16.~~ A computer system comprising:

one or more computer processors;

one or more computer readable storage media; and

program instructions stored on the computer readable storage media for execution by at least one of the one or more processors, the stored program instructions comprising:

program instructions to identify data sources, the data sources ~~being~~ configured to provide ~~sensor data and timestamping of the~~ sensor data as a first set of one or more time series, the sensor data comprising values of a first group of measurands;

program instructions to determine that values of a second group of one or more of the measurands of a subset of the sensor data ~~indicates~~indicate an anomaly, wherein the subset of the sensor data is provided by a given data source of the data sources, and ~~covering a time window,~~wherein the given data source comprises a set of components;

program instructions to determine a third group of one or more of the measurands ~~that are root cause~~ as candidates for identifying a root cause of the anomaly ~~using a set of one or more similarity techniques for comparing values of the second group of measurands and the third group of measurands in the time window, wherein the measurands of the third group are provided by the set of components~~;

~~for each similarity technique of the set of similarity techniques and for each measurand of the second group,~~ program instructions to assign ~~a set~~respective sets of coefficients to the ~~measurand~~measurands of the second group, wherein each coefficient of the ~~set~~respective sets of coefficients is indicative of a comparison result of ~~the each~~a measurand of the second group with a measurand of the third group using ~~the~~a similarity technique of a set of similarity techniques;

program instructions to ~~determine, using~~combine the respective sets of coefficients~~, whether~~ for respective measurands of the second group, resulting in respective sets of combined coefficients; and

program instructions to identify a specific subset of the set of components of the given data source ~~can be identified~~ as ~~a~~the root cause of the anomaly~~; and~~ using the respective sets of combined coefficients.

16. ~~in response to determining that~~ The computer system of claim 15, wherein the program instructions to identify the specific subset of the set of components of the given data source ~~can be identified as the root cause of the anomaly, program instructions to provide the specific subset of components~~ as the root cause of the anomaly~~.~~ using the respective sets of combined coefficients comprise:

~~17. The computer system of claim 16, further comprising program instructions, stored on the computer readable storage media for execution by at least one of the one or more processors, to:~~

~~program instructions to,~~ in response to determining that no specific subset of the set of components of the given data source can be identified as ~~a~~the root cause of the anomaly, update the third group of measurands;

~~for each similarity technique of the set of similarity techniques and for each measurand of the second group,~~ program instructions to assign ~~an~~ respective sets of updated ~~set of~~ coefficients to the ~~measurand, wherein each coefficient of~~ measurands of the second group based, at least in part, on the updated third group;

program instructions to combine the respective sets of updated ~~set of~~ coefficients ~~is indicative~~for respective measurands of the ~~comparison result of the each measurand with a measurand of the updated third group using the similarity technique; and~~

~~determine using the~~ second group, resulting in respective sets of updated ~~sets of~~combined coefficients~~, whether~~; and

program instructions to identify the specific subset of the set of components of the given data source ~~can be identified~~ as the root cause of the anomaly using the respective sets of updated combined coefficients.

~~18.~~ 17. The computer system of claim ~~16~~15, wherein the specific subset of the set of components is a single component of the set of components.

18.

~~19.~~ A computer program product comprising:

one or more computer readable storage media and program instructions stored on the one or more computer readable storage media, the stored program instructions comprising:

~~to~~ program instructions to identify data sources, the data sources ~~being~~ configured to provide ~~sensor data and timestamping of the~~ sensor data as a first set of one or more time series, the sensor data comprising values of a first group of measurands;

program instructions to determine that values of a second group of one or more of the measurands of a subset of the sensor data ~~indicates~~indicate an anomaly, wherein the subset of the sensor data is provided by a given data source of the data sources, and ~~covering a time window,~~wherein the given data source comprises a set of components;

program instructions to determine a third group of one or more of the measurands ~~that are root cause~~ as candidates for identifying a root cause of the anomaly ~~using a set of one or more similarity techniques for comparing values of the second group of measurands and the third group of measurands in the time window, wherein the measurands of the third group are provided by the set of components~~;

~~for each similarity technique of the set of similarity techniques and for each measurand of the second group,~~ program instructions to assign ~~a set~~respective sets of coefficients to the ~~measurand~~measurands of the second group, wherein each coefficient of the ~~set~~respective sets of coefficients is indicative of a comparison result of ~~the each~~a measurand of the second group with a measurand of the third group using ~~the~~a similarity technique of a set of similarity techniques;

program instructions to ~~determine, using~~combine the respective sets of coefficients~~, whether~~ for respective measurands of the second group, resulting in respective sets of combined coefficients; and

program instructions to identify a specific subset of the set of components of the given data source ~~can be identified~~ as ~~a~~the root cause of the anomaly~~; and~~ using the respective sets of combined coefficients.

19.~~in response to determining that~~ The computer program product of claim 18, wherein the program instructions to identify the specific subset of the set of components of the given data source ~~can be identified as the root cause of the anomaly, program instructions to provide the specific subset of components~~ as the root cause of the anomaly~~.~~ using the respective sets of combined coefficients comprise:

~~20. The computer program product of claim 19, further comprising~~ program instructions~~,~~ ~~stored on the one or more computer readable storage media,~~ to~~:~~

~~_____~~, in response to determining that no specific subset of the set of components of the given data source can be identified as ~~a root cause of the anomaly, update third group of measurands;~~

~~for each similarity technique of the set of similarity techniques and for each measurand of the second group, assign an updated set of coefficients to the measurand, wherein each coefficient of the updated set of coefficients is indicative of the comparison result of the each measurand with a measurand of the updated third group using the similarity technique; and~~

~~determine using the updated sets of coefficients, whether the specific subset of the set of components of the given data source can be identified as~~ the root cause of the anomaly~~.~~, update the third group of measurands;

program instructions to assign respective sets of updated coefficients to the measurands of the second group based, at least in part, on the updated third group;

program instructions to combine the respective sets of updated coefficients for respective measurands of the second group, resulting in respective sets of updated combined coefficients; and

program instructions to identify the specific subset of the set of components of the given data source as the root cause of the anomaly using the respective sets of updated combined coefficients.

20. The computer program product of claim 18, wherein the specific subset of the set of components is a single component of the set of components.