Claims:

1. A system for facilitating prediction of wear and tear and subsequent failure of components associated with gas extraction in a mining well, said system comprising:

one or more user equipment communicatively coupled to Coal Bed Methane (CBM) wells for gas extraction;

one or more sensors coupled to one or more pumps in the mining well;

wherein the one or more user equipment comprises one or more processors that execute a set of executable instructions that are stored in a memory, upon which execution, the processor causes the system to:

acquire a set of data packets from the one or more sensors, by a data acquisition engine, wherein the set of data packets are received at any synchronous and asynchronous instances of time;

extract a set of attributes, by a feature generation engine, from the synchronised data packets, wherein the feature generation engine is configured to generate features from the extracted set of attributes associated with interpolation of the received data packets;

evaluate, by a generative adaptive network (GAN) model comprising an adversarial training engine, a generator G and a discriminator D, a set of model parameters comprising synthetic data packets, in particular, during the adversarial training, the generator G is trained to generate the synthetic data packets based on the generated features of the extracted set of attributes in good condition, the discriminator D is trained to classify the extracted set of attributes a good or not good working condition comparing the extracted set of attributes with the synthetic data packets, and the generator G and discriminator D weights are updated iteratively within the adversarial training engine;

based on the evaluation of the set of model parameters, predict, by a prediction engine, failures associated with the received set of data packets.

2. The system as claimed in claim 1, wherein the mining well comprises any oil, methane, coal bed or a combination thereof.

3. The system as claimed in claim 1, wherein the received data packets are synchronized by converting the received data packets to a synchronous and regular time interval data packets.

4. The system as claimed in claim 1, wherein the adversarial training engine is configured to detect anomalies associated with the set of model parameters.

5. The system as claimed in claim 2, wherein the one or more user equipment comprises a SIM, wherein the SIM comprises elementary files and location parameters associated with the one or more user equipment.

6. The system as claimed in claim 1, wherein the adversarial training engine is configured to monitor and update the one or more model parameters such that the system is configured to train itself to obtain the one or more model parameters to predict anomalies and generate failure data over a plurality of time interval.

7. The system as claimed in claim 1, wherein the adversarial training engine is configured to label the failures by marking certain days data ahead of failure as belonging to failure data.

8. A method for facilitating prediction of wear and tear and subsequent failure of components associated with gas extraction in a mining well, said method comprising:

acquiring, by the data acquisition engine, a set of data packets from one or more sensors, wherein the set of data packets are received at any synchronous and asynchronous instances of time;

extracting, by a feature generation engine, a set of attributes from the acquired set of data packets, wherein the feature generation engine is configured to generate features from the extracted set of attributes associated with interpolation of the acquired data packets;

evaluating, by a generative adaptive network (GAN) model comprising an adversarial training engine, a generator and a discriminator, a set of model parameters comprising synthetic data packets, in particular, during the adversarial training, the generator G is trained to generate the synthetic data packets based on the generated features of the extracted set of attributes in good condition, the discriminator D is trained to classify the extracted set of attributes a good

or not good working condition comparing the extracted set of attributes with the synthetic data packets, and the generator G and discriminator D weights are updated iteratively within the adversarial training engine;

based on the evaluation of the set of model parameters, predict, by a prediction engine, failures associated with the received set of data packets.

9. The method as claimed in claim 8, wherein the predicted failures are labelled and categorised for efficient planning.

10. The method as claimed in claim 8, wherein noisy and missing data are identified, and wherein interpolation is used to estimate the noisy and missing data.

11. The method as claimed in claim 8, wherein model parameters evaluated by the adversarial training engine corresponds to recall rate, precision and accuracy, wherein recall rate is associated with number of failures detected correctly to total number of actually occurred failures, wherein precision is associated with number of failures detected correctly and total number of failures detected.