RECENT PATENT PUBLICATIONS ON ARTIFICIAL INTELLIGENCE (AI) IN HEALTHCARE

AI in healthcare has witnessed an upward trend in terms of technology and devices. Here, we present snapshots from some recent publications related to this field.

Publication No
- US20200373011

Title
- Cardiometric Spectral Imaging System

Summary
- This invention meets the need to eliminate early cardiac abnormality detection limitations due to a Physician or Health Care Professional's inability to auscultate hearts sounds in the 3 Hz to 40 Hz frequency range using an acoustic or electronic stethoscope. Deep Learning Neural Network (DLNN) based Artificial Intelligence (AI) algorithms are used to identify the cardiac abnormality with a 97% accuracy.

Publication No
- US20200380737

Title
- Method and System for Improving CT Image Quality

Summary
- Embodiments of the present disclosure may disclose a method for improving CT image quality. The present disclosure may simulate the single focal spot (SFS) image as a flying focal spot (FFS) image using a deep neural network model, thereby improving a resolution of the SFS image and reduce artifacts in the SFS image.

Publication No
- IN202041049358

Title
- Voice Based Patients Monitoring System Using Artificial Intelligence Techniques

Summary
- Artificial intelligence based patient monitoring system provides superior monitoring without patients intervention. This method of monitoring provides provision to patient to hear doctor's voice in a frequent period and they can answer to the doctor's questions. Artificial intelligence plays major role in asking questions to the patients based on their response, by parsing. The monitoring of the patients could be heart rate measurements, blood pressure measurements, glucometers, temperature measurements, etc.

Publication No
- US20200387828

Title
- Method and Process for Using Machine Learning to Categorize Service Suppliers

Summary
- The present invention relates to a method and process for transforming user files using a machine learning algorithm and a natural language processing to determine and categorize supplier entities (eg. medical device manufacturer).

Publication No
- WO2020236481

Title
- Computer-implemented System And Methods for Predicting The Health and Therapeutic Behavior of Individuals Using Artificial Intelligence, Smart Contracts and Blockchain

Summary
- Computer-implemented system and methods for predicting the health and therapeutic behavior of individuals using artificial intelligence, smart contracts, and a blockchain database are provided. The system and methods disclosed herein may use a blockchain database of a blockchain network, preferably through creating Smart Healthcare contracts, to predict medication usage and spending of patients over time.

Maintenance Recommendations

Summary
- An Artificial Intelligence (AI) syster healthcare data from an individua diagnostic testing, physical examination and questionnaires as well as the individuals personal health goals. The collected data is provided to an AI

Publication No

- US20200364864

Title

- Systems and Methods for Generating Normative Imaging Data for Medical Image Processing Using Deep Learning

Summary

- Methods and systems are provided for generating a normative medical image from an anomalous medical image. In an example, the method includes receiving an anomalous medical image, wherein the anomalous medical image includes anomalous data, mapping the anomalous medical image to a normative medical image using a trained generative network of a generative adversarial network (GAN), wherein the anomalous data of the anomalous medical image is mapped to normative data in the normative medical image.

Publication No

- EP3737930

Title

- Methods and Apparatus for Bio-fluid Specimen Characterization Using Neural Network Having Reduced Training

Summary

- A method of training a neural network (Convolutional Neural Network - CNN) including reduced graphical annotation input is provided. The training method can be used to train a Testing CNN that can be used for determining Hemolysis (H), Icterus (I), and/or Lipemia (L), or Normal (N) of a serum or plasma portion of a test specimen.

Publication No

- US20200388386

Title

- Artificial Intelligence Dispatch In Healthcare

Summary

- Patient, user, and/or AI information are used in a multi-objective optimization to select one of a plurality of available AIs for a task. On a patient or user-specific basis, an optimal AI is selected and applied for medical imaging or other healthcare actions. The selection may be before application, avoiding costs of applying multiple AIs to obtain the best results. The optimization may be based on AI performance, AI inclusion and/or exclusion criteria, and/or pricing information. By using optimization based on various information related to the patient, user, and/or available AI, the application of AI for a given user and/or patient by the computer may be improved.

Publication No

- US20200381131

Title

- System and Method for Healthcare Compliance

Summary

- The present embodiments disclose a system and method for managing compliance in healthcare protocols. A plurality of sensors and microphones monitor an environment and generate a plurality of output signals. An analysis subsystem receives the plurality of output signals from the plurality of sensors and microphones. An Artificial Intelligence (AI) and machine learning subsystem compare the plurality of output signals with a dynamic database of healthcare protocols while a rating system determines a rating corresponding to a level of adherence to the dynamic database of healthcare protocols. An alert system generates an alert corresponding to the level of adherence.

Publication No

- WO2020243576; US20200375549

Title

- Systems for Biomonitoring and Blood Glucose Forecasting, and Associated Methods

Summary

- Systems and methods for biomonitoring and personalized healthcare are disclosed herein. In some embodiments, a computer-implemented method for forecasting a blood glucose state of a patient is provided.

Publication No

- US20200387786

Title

- Method for Learning from Data with Label Noise

Summary

- A method and a system are for performing at least one inference task on medical input data. In an embodiment, the system includes: a computing device configured to implement an artificial neural network, ANN.