Health Sync

RXO CO., Ltd

Contents

Company Introduction

Company Name: RXO Inc.

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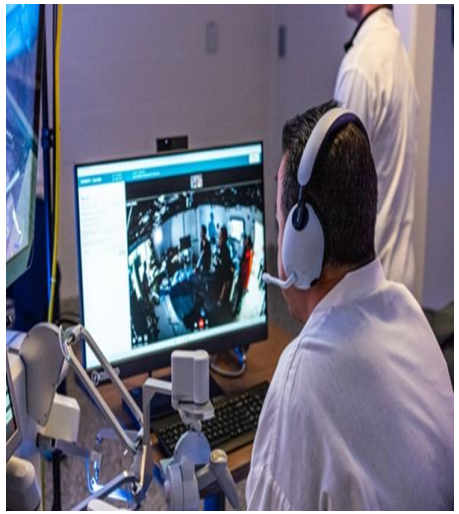
Company Vision: A huge multi-national

corporation deploying global strategies

Project Introduction

A Bluetooth IoT healthcare platform that controls devices, monitors health data, and predicts disease using environmental sensors and camera detection systems.

Mobile hospital



A portable, rapidly deployable medical support equipment that provides emergency medical assistance in disaster areas, battlefields, remote locations, large events, and high-traffic areas. It also offers real-time monitoring and easy operation through mobile apps and web interfaces..

Includes a computerized system for efficient patient management, enabling the use of medical information integration and AI-based diagnostic support systems in disaster areas and similar environments..

01

Building Management Functions

Building Management Function Introduction

Air Quality Detection

Air quality sensors collect data on indoor carbon monoxide levels, carbon dioxide concentration, temperature, humidity, and dust distribution. Based on this collected data, the system enables adjustment and control of interior air quality.

Air Quality Automatic Control

Based on the detected air quality, the system automatically controls all electronic devices that can significantly impact air quality - such as air conditioners, humidifiers, heaters, and ventilation fans - to maintain the most suitable indoor environment.

Building Management Function Introduction

Emergency Elevator Auto Call

Emergency Elevator Automatic Call system pre-positions elevators for emergency patients or medical staff, and automatically opens elevator doors to support rapid movement.

Light Control

The lighting automatically adjusts to match the operational status of medical equipment, maintaining optimized illumination levels for device usage. The brightness levels change naturally over time, supporting both medical staff and patients by providing the optimal environment for treatment.

Building Management Function Introduction

MRI Metal Detector

The system manages patient access to MRI examination rooms through magnetic sensors. Its purpose is to prevent patients and medical staff from inadvertently bringing metal objects or electronic devices into the MRI area.

NFC-Based Individual Patient Management

NFC technology is used to efficiently manage individual patient medical information, allowing medical staff to quickly access patient records, medication history, allergy information, and more by simply scanning an NFC tag, enabling more accurate and personalized medical services.

Building Management Function Introduction

Pharmaceutical Management Room Security

A comprehensive smart building management system for healthcare facilities featuring automated air quality control, emergency elevator services, adaptive lighting, MRI safety protocols, NFC patient tracking, and secure pharmaceutical storage to optimize medical operations and patient care.

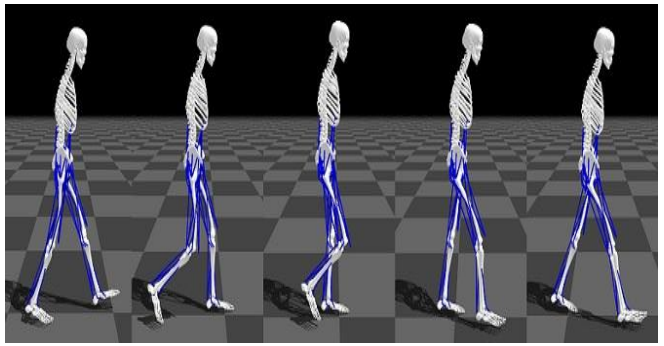
Operating Room Sterile Environment Maintenance

Automated operating room sterility management system that continuously monitors air quality and environmental conditions through specialized sensors, automatically adjusting parameters to maintain optimal aseptic conditions and significantly reduce infection risks during surgical procedures..

02

Patient Management function

Patient Management Function



Indoor Patient Safety Management

accuracy 95%

The system automates patient safety monitoring using vision AI models for real-time surveillance. It automatically detects and alerts medical staff to critical situations such as falls, seizures, and respiratory distress.

Infrared Thermal Camera

Advanced infrared thermal imaging system that continuously monitors patient temperatures and automatically alerts medical staff when abnormal readings are detected.

Patient management Function Introduction

NFC-Based Individual Patient Management

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03

Diagnostic Support Functions

Diagnostic Support Function Introduction

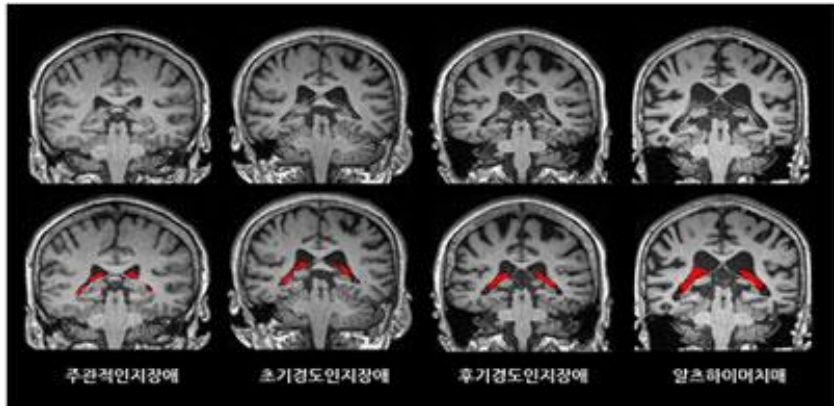
Polyp Analysis Model

The System enhanced diagnostic accuracy by displaying bounding boxes on endoscopy screens, identifying the presence, location, and size of polyps to assist medical staff during procedures.

Endoscopy 3D Model

The system provides functionality to convert 2D endoscopic images into 3D models using endoscopic video data, allowing medical professionals to analyze lesions more precisely. This enables medical staff to more intuitively understand the shape and size of lesions, thereby improving diagnostic accuracy.

Diagnostic Support Function Introduction



Dementia Diagnosis Prediction AI

The AI analyzes brain MRI images to predict the presence and probability of dementia, providing lifestyle recommendations to patients for dementia prevention.

Skin Cancer Diagnosis Prediction AI

The system analyzes skin images to predict the presence of skin cancer and the probability of malignant tumors, assisting in early skin cancer diagnosis. This model recognizes morphological features of skin lesions and distinguishes between benign and malignant conditions to support medical diagnosis.


THANK YOU