

(54) Title of the invention : The Implementation of Artificial Intelligence on the Internet of Things for the Purpose of Improving the Efficiency of the Medical Service Consultation System

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(71)Name of Applicant :  
**1)Dr. BHARAT BHUSHAN AGARWAL**  
Address of Applicant :ASSOCIATE PROFESSOR COMPUTER SCIENCE & ENGINEERING DEPARTMENT SCHOOL OF COMPUTER SCIENCE AND APPLICATIONS IFTM UNIVERSITY PIN: 244102 DISTRICT: MORADABAD STATE: UTTAR PRADESH COUNTRY:INDIA -----  
**2)Dr. Shanti Mahesh**  
**3)Dr. Jyoti Metan**  
**4)Dr. Tanuja Lella**  
**5)Dr Aswini.J**  
**6)Dr GYANSHANKAR PRAPHULLAKUMAR MISHRA**  
**7)Mrs. K.SAMUNNISA**  
**8)Dr. Kaushik Mishra**  
**9)Dr.Hemant Yadav**  
**10)Mr. M.Bhavsingh**  
**11)Dr. Harikumar Pallathadka**  
Name of Applicant : NA  
Address of Applicant : NA  
(72)Name of Inventor :  
**1)Dr. BHARAT BHUSHAN AGARWAL**  
Address of Applicant :ASSOCIATE PROFESSOR COMPUTER SCIENCE & ENGINEERING DEPARTMENT SCHOOL OF COMPUTER SCIENCE AND APPLICATIONS IFTM UNIVERSITY PIN: 244102 DISTRICT: MORADABAD STATE: UTTAR PRADESH COUNTRY:INDIA -----  
**2)Dr. Shanti Mahesh**  
Address of Applicant :Professor Atria Institute of Technology 1st Main Rd, Ags Colony, Anandnagar, Hebbal,Near Bapasis Hospital Bengaluru, Karnataka. Pin: 560024 District: Bengaluru State: Karnataka Country: India -----  
**3)Dr. Jyoti Metan**  
Address of Applicant :Associate Professor Atria Institute of Technology 1st Main Rd, Ags Colony, Anandnagar, Hebbal,Near Bapasis Hospital, Bengaluru, Karnataka Pin: 560024 District: Bengaluru State: Karnataka Country: India -----  
**4)Dr. Tanuja Lella**  
Address of Applicant :MBBS, MD(PHARMACOLOGY) Dept: Dept of Pharmacology Sree balaji medical college and hospital Address: 7, Works road, Chromepet, Chennai, Tamil Nadu, India. Pin: 600044 Dist : Chennai State: Tamil Nadu Country: India -----  
**5)Dr Aswini.J**  
Address of Applicant :Professor Saveetha Engineering College Pin:602105 District: Chennai State: Tamilnadu Country: India -----  
**6)Dr GYANSHANKAR PRAPHULLAKUMAR MISHRA**  
Address of Applicant :ASSOCIATE PROFESSOR, RESPIRATORY MEDICINE DEPARTMENT OF RESPIRATORY MEDICINE, INDIRA GANDHI GOVERNMENT MEDICAL COLLEGE, CA ROAD, NAGPUR , MAHARASHTRA PIN:440018 DISTRICT: NAGPUR STATE: MAHARASHTRA COUNTRY: INDIA -----  
**7)Mrs. K.SAMUNNISA**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering. College Name with Address: ASHOKA WOMEN'S ENGINEERING COLLEGE, NH - 44, Opposite Dupadu Railway Station, Kurnool Pin: 518218 State: Andhra Pradesh District: Kurnool Country: India -----  
**8)Dr. Kaushik Mishra**  
Address of Applicant :Amity School of Communication, Amity University, AA II Newtown, Kolkata Pin:700135 District: kolkata State: West Bengal Country: India, -----  
**9)Dr.Hemant Yadav**  
Address of Applicant :Professor Future Institute of Engineering & Technology 18th Milestone, Bareilly- Lucknow Highway NH - 24, Near Faridpur, Pin: 243123 District: Bareilly State: Uttar Pradesh Country: India -----  
**10)Mr. M.Bhavsingh**  
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering. College Name with Address: G Pullaiah College of Engineering and Technology, Kurnool Pin: 518002 District: Kurnool State: Andhra Pradesh Country: India -----  
**11)Dr. Harikumar Pallathadka**  
Address of Applicant :Director and Professor Manipur International University, Ghari, Imphal, Imphal West, Pin: 795140 District : Imphal State: Manipur Country: India -----

(57) Abstract :  
Doctors are currently less aware of artificial intelligence-assisted diagnosis systems, despite the rapid development of artificial intelligence-assisted diagnosis systems. Application development for artificial intelligence medical assistant diagnostic systems can be facilitated by gaining an understanding of how to facilitate the acceptance and utilisation of artificial intelligence medical assistant diagnosis systems by medical professionals. This paper proposes a business operation model for Internet of Things medical consultation services that is based on the participation of multiple parties and the sharing of medical consultation resources. This model was developed in consideration of the current challenges that Internet of Things medical consultation services are facing. We finished the building of the artificial intelligence medical service model, which included designing the information flow, general logic, and service implementation process of the service model. We clarify how to use IoT devices by combining IoT technology with other technologies to establish an ecosystem for monitoring vital signs. The contribution of different samples to the weight change is not significantly different in the error back propagation algorithm. Because of this, the adjustment of network parameters is not easily affected by difficult medical consultation samples. As a result, the effect of network medical consultation is reduced. This article defines the degree to which the sample belongs to its right category as the confidence of medical inquiry, and it separates the training sample into a dangerous sample and a safe sample according to a dynamic threshold in order to address the problem that was presented before. Given the complexity of medical research, a more advanced form of the traditional learning algorithm is provided here. Because of this, the convolutional neural network will pay closer attention to potentially harmful data and will be able to acquire more useful information. The algorithm will punish the loss of potentially harmful samples. In this paper, an adjustment is made to the structure of the convolutional neural network so that it can take into account the richness of data characteristics as well as the dynamics of data changes over time. This adjustment is made with the goal of achieving the eight physiological characteristics of data. Because of the realised CNN optimization algorithm model, the prediction effect has been increased, and the accuracy rate of medical consultation has reached 90.15 percent, which is higher than that of other machine learning algorithms.