

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311048188 A

(19) INDIA

(22) Date of filing of Application :18/07/2023

(43) Publication Date : 11/08/2023

(54) Title of the invention : GAIT DETECTION SYSTEM AND A METHOD THEREOF

(51) International classification :A01K 290000, A61B 050000, A61B 051100, A61H 010200, A61H 030000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)Name of Applicant :

1)Chitkara University

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Chitkara Innovation Incubator Foundation

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Dr. Vikas Khullar

Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

2)Dr. Rishu Chhabra

Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura -----

(57) Abstract :

ABSTRACT GAIT DETECTION SYSTEM AND A METHOD THEREOF A gait detection system (100) for gait detection of a human and a method are disclosed. The system comprises an image capturing unit (102) configured to capture image of a human, a doppler radar (104) configured to receive doppler data from the human, a 3-axis accelerometer sensor (106) is configured to receive acceleration data from the human and a memory unit (110) configured to store a multimodal deep learning model, wherein the multimodal deep learning model receives input from each of the image capturing unit, the doppler radar and the 3-axis accelerometer sensor. The system further comprises a processing unit (108) coupled to the memory unit (108) and is configured to classify the human based on an output received from the multimodal deep learning model, wherein the classification includes classifying the human as gait and non-gait based on the classification. [Figure 1]

No. of Pages : 15 No. of Claims : 10