

2) PATENT APPLICATION PUBLICATION

(21) Application No.202341029620 A

(19) INDIA

(22) Date of filing of Application :24/04/2023

(43) Publication Date : 05/05/2023

(54) Title of the invention : ARTIFICIAL INTELLIGENCE TECHNIQUES FOR NETWORK TRAFFIC PREDICTION MODEL CONSIDERING ROAD TRAFFIC PARAMETERS

(51) International classification :G06N 030800, G06N 050400, G06N 200000, G06Q 300200, G08G 010100  
 (86) International Application No :PCT//  
 Filing Date :01/01/1900  
 (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)T. Vamsi

Address of Applicant :Assistant Professor, Department of Civil Engineering, B.V.Raju Institute of Technology, Narsapur-502313, Medak District, Telangana, India Narsapur -----

2)Abdul Ahad

3)Dr. Nityanand S. Kudachimath

4)Ms. Sneha Suresh Bhende

5)Dr. Sikandar Ankush Rasal

6)Yogesh Pathak

7)Hemant Suresh Avhad

8)Kannadasan B

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)T. Vamsi

Address of Applicant :Assistant Professor, Department of Civil Engineering, B.V.Raju Institute of Technology, Narsapur-502313, Medak District, Telangana, India Narsapur -----

2)Abdul Ahad

Address of Applicant :Research Scholar, Department of Civil Engineering, Faculty of Engineering &amp; Technology, Jamia Millia Islamia, New Delhi-110025, India New Delhi -----

3)Dr. Nityanand S. Kudachimath

Address of Applicant :Associate Professor, Department of Civil Engineering, Jain college of Engineering, Belagavi-590014, Karnataka, India Belagavi -----

4)Ms. Sneha Suresh Bhende

Address of Applicant :Assistant Professor, RMD Sinhad School of Engineering, Warje, Pune-411058, Maharashtra Pune -----

5)Dr. Sikandar Ankush Rasal

Address of Applicant :Assistant Professor, Department of Civil Engineering, Datta Meghe College of Engineering, Airoli, Navi Mumbai-400 708, Maharashtra Mumbai -----

6)Yogesh Pathak

Address of Applicant :Assistant professor, G.C.R.G Group of Institutions, Lucknow- 226202, Uttar Pradesh Lucknow -----

7)Hemant Suresh Avhad

Address of Applicant :Manager- Planning, Mahindra Lifespaces Developers Limited, 5thFloor, Mahindra Towers, Worli, Mumbai -400 018, Maharashtra Mumbai -----

8)Kannadasan B

Address of Applicant :CEO and Subject Matter Expert (SME), Department of Civil, Architectural Engineering and planning, Kannadasan Balakrishnan Research Foundation, Kalieswari nagar, Peraiyur-625703, Madurai District, Tamil Nadu Peraiyur -----

(57) Abstract :

ABSTRACT OF THE INVENTION ARTIFICIAL INTELLIGENCE TECHNIQUES FOR NETWORK TRAFFIC PREDICTION MODEL CONSIDERING ROAD TRAFFIC PARAMETERS The present invention relates to artificial intelligence techniques for network traffic prediction model considering road traffic parameters. Vehicular Ad hoc Networks (VANETs) are established on vehicles that are intelligent and can have Vehicle-to-Vehicle (V2V) and Vehicle-to-Road Side Units (V2R) communications. The present invention comprises a model for predicting network traffic by considering the parameters that can lead to road traffic happening. The present model integrates a Random Forest- Gated Recurrent Unit- Network Traffic Prediction algorithm (RF-GRU-NTP) to predict the network traffic flow based on the traffic in the road and network simultaneously. The present model has three phases including network traffic prediction based on V2R communication, road traffic prediction based on V2V communication, and network traffic prediction considering road traffic happening based on V2V and V2R communication. Figure of abstract: FIG. 1

No. of Pages : 18 No. of Claims : 3

The Patent Office Journal No. 18/2023 Dated 05/05/2023

34576