(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :10/01/2024

(21) Application No.202411001814 A
(43) Publication Date : 02/02/2024

(54) Title of the invention : SYSTEM AND METHOD FOR WEATHER FORECASTING

(51) International classification :H04L0009000000, G01W0001100000, G01W0001000000, G06Q0050060000, G06Q0040080000
(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. Patiala ---------- ----------
2)Bluest Mettle Solutions Private Limited
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)MISHRA, Rahul
Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ---------- ----------
2)PANDEY, Sakshi
Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune ---------- ----------
3)SINGH, Jaiteg
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ---------- ----------

(57) Abstract :
The present invention discloses a system (100) and a method (200) for online weather forecasting that employs homomorphic encryption to ensure the privacy and security of weather data. The system includes a server (106) that receives and stores weather data from multiple sources. Additionally, the system includes a processor (102) to encrypt the received weather data using homomorphic encryption through a dedicated encryption module. The system allows users to access a range of weather forecasting tools and examine the encrypted weather data through a user interface on a computing device. The processor generates real-time weather updates and forecasts based on the encrypted data and generates alerts according to user preferences. The generated updates, forecasts, and alerts are transmitted to the computing device. The system ensures data integrity, confidentiality, and personalized weather information while providing efficient and accurate weather forecasting services.

No. of Pages : 21 No. of Claims : 10