(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :15/10/2025
(21) Application No.202511099493 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : AN AUTOMATED SYSTEM FOR DETECTING NETWORK PERFORMANCE ANOMALIES

(51) International classification	:H04L0009400000, H04L0041160000, G06N0020000000, H04L0043160000, H04L0043081700
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No Filing Date	: :01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(72)**Name of Inventor :**
1)ASHISH KUMAR
2)ADITEE MATTOO

(57) Abstract :
The invention discloses an automated system for detecting network performance anomalies comprising a Data Collection Module (101), Preprocessing Unit (102), Anomaly Detection Engine (103), Machine Learning Predictor (104), Alert & Visualization Dashboard (105), and Administrator Console (106). The system monitors performance metrics such as latency, jitter, and bandwidth utilization, processes the data, and applies hybrid detection algorithms with predictive intelligence. It minimizes false positives, adapts dynamically to evolving traffic patterns, and provides actionable insights to administrators. This ensures accurate, scalable, and proactive anomaly detection in heterogeneous network environments.

No. of Pages : 15 No. of Claims : 6