(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :05/09/2024

(21) Application No.202421067064 A

(43) Publication Date : 11/10/2024

(54) Title of the invention : A SYSTEM SELF-OPTIMIZING NEURAL NETWORKS FOR EFFICIENT ENERGY CONSUMPTION

(51) International classification :G06N0003040000, G06N0003080000, G06Q0010060000, H04W0084180000, G05B0015020000

(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)KALINGA UNIVERSITY RAIPUR
Address of Applicant :NAYA RAIPUR, CHHATTISGARH 492101, INDIA Raipur ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)DR. NIDHI MISHRA
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, KALINGA UNIVERSITY RAIPUR, NAYA RAIPUR, CHHATTISGARH-492101, INDIA Raipur ---------- ----------
2)MS. PALVI SONI
Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, KALINGA UNIVERSITY RAIPUR, NAYA RAIPUR, CHHATTISGARH-492101, INDIA Raipur ---------- ----------

(57) Abstract :
Disclosed herein is a system self-optimizing neural network for efficient energy consumption comprises a neural network architecture configured to perform computational tasks and process data inputs. The system includes an energy monitoring module configured to continuously measure and record the energy consumption of various components during operation. The system also includes an optimization module configured to analyze the energy consumption data and dynamically adjust the neural network's operational parameters. The system also includes a feedback mechanism configured to provide real-time adjustments to the neural network based on the optimization module's recommendations and ongoing energy consumption metrics. The system also includes a performance assessment module configured to evaluate the impact of the operational adjustments on the neural network's performance. The system also includes a user interface configured to allow manual or automated input of energy consumption goals and performance criteria, and to display real-time energy usage statistics and optimization results. The system also includes an adaptation algorithm configured to learn from historical energy consumption data and optimization outcomes, facilitating continual improvement in energy efficiency over time.

No. of Pages : 20 No. of Claims : 5