

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511063282 A

(19) INDIA

(22) Date of filing of Application :03/07/2025

(43) Publication Date : 18/07/2025

(54) Title of the invention : A SMART COMPUTING DEVICE FOR AUTOMATIC CODE OPTIMIZATION ANALYSIS

(51) International classification :G06F0008410000, G06F0011360000, G06F0008720000, G06N0020000000, G06F0011340000

(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)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY**

Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. -----

**Name of Applicant : NA**

**Address of Applicant : NA**

(72)Name of Inventor :

**1)NISHA**

Address of Applicant :Department of Electronics and Communication Engineering, Noida Institute of Engineering & Technology, Greater Noida. Greater Noida -----

(57) Abstract :

A smart computing device (100) performs automatic code optimization analysis using a static analysis module (102), dynamic profiler (103), and machine learning optimization unit (105). Input code is processed via a user interface (101), analyzed for inefficiencies, and refactored using an optimization engine (106). Performance gains are visualized on a dashboard (107). The system enhances execution speed, memory efficiency, and developer productivity while offering real-time, platform-independent optimization support.

No. of Pages : 14 No. of Claims : 5