G.E.S's R. H. Sapat College of Engineering, Management Studies and Research, Nashik

Technical Bulletin
A.Y. 2025-26(Sem-I)

Department of

Electronics and Telecommunication Engineering

GES's R. H. Sapat College of Engineering, Management Studies & Research, Nashik

Vision

- To produce world class engineers for converting global challenges into opportunities through value embedded quality technical education.
- To develop this college as an academy of higher learning in the field of engineering & technology.

Mission

- To impart technical education through effective teaching- learning process.
- To nurture creativity and critical thinking in applying engineering skills to face the fast- growing globalization.
- To develop holistic personality of learners.
- To make this institute as a lead centre of research.

Department of Electronics & Telecommunication Engineering

Vision

- To facilitate the continuous transformation of students into competent professionals and responsible citizens who apply efforts towards betterment of the society.

Mission

- To provide high-quality technical education through excellence in teaching learning and research, facilitating assimilation and dissemination of knowledge that will produce competent professionals capable of meeting societal needs.
- To foster talented entrepreneur in a supportive & creative environment that encourages innovative ideas.
- To promote continuous engagement with alumni, industry, educational institutions and other stake holders.

Program Specific Outcomes (PSO's)

PSO1: To Create Electronics and Telecommunication engineering graduates with fundamentals of sciences, mathematics and technical expertise with an ability to outperform in professional career and/or higher education.

PSO2: To apply the concepts of Electronics and Telecommunication Engineering to design and solve complex problems in the field related to Analog and Digital electronics, embedded systems, communications, signal processing and VLSI systems using Electronics equipment and EDA tools.

PSO3: Inculcate multidisciplinary expertise along with leadership and problem-solving skills for life-long learning and development.

Program Educational Objectives (PEOs)

PEO1: Graduates will apply their electronics and telecommunication engineering knowledge design and implement solutions to real-world problems.

PEO2: Graduates will develop innovative ideas and creative solutions to address professional challenges and pursue higher education, research, or a professional career.

PEO3: Graduates will demonstrate professional ethics, work effectively in teams or independently, and function competently in a rapidly changing world by means of alumni, industry, educational institutions.

Department of Electronics and Telecommunication Engineering

Technical Bulletin

❖ **Technical Activities**

o Enormous efforts are taken with an objective to embed sound academic fundamentals among students to formulate, analyze and solve real life problems related to their domain and area of expertise.

o An expert talk on "Career Opportunities in Space Science & Technology"

Resource Person	Er. Apurva Jakhade (Space Educator)
No. of Participants	96
Date	06/08/2025
Coordinator	Dr. P. J. Mondhe
Students' Chapter	IETE

o An expert talk on "Modern EDA Tool- Multisim"

Resource Person	Mr. Umesh Gite
No. of Participants	24
Date	11/08/2025
Coordinator	Dr. M. P. Joshi
Students' Chapter	ESTA

- **Hands-on workshop on "AIML"**

Resource Person	Dr. Ranjit K. Pathak
No. of Participants	45
Date	11/08/2025 & 12/08/2025
Coordinator	Mrs. M. S. Gahiwad
Students' Chapter	IEEE

- **An expert talk on "Design & Development of Microstrip Antennas & Filters"**

Resource Person	Dr. J. G. Joshi
No. of Participants	50
Date	13/08/2025
Coordinator	Mrs. M. S. Gahiwad
Students' Chapter	IEEE

- **An expert talk on "How Can a Personal Brand Help You Achieve the Exceptional"**

Resource Person	Ms. Kanishka Thakur
No. of Participants	50
Date	11/09/2025
Coordinator	Dr. P. J. Mondhe
Students' Chapter	IETE

o **An expert talk on "UPSC: A Path for Civil Services"**

Resource Person   Mr. Dnyaneshwar Patil
No. of Participants   45
Date   16/09/2025
Coordinator   Dr. M. P. Joshi
Students' Chapter   ESTA

o **A hands-on workshop on "I-Measure"**

Resource Person   Mrs. M. S. Gahiwad, Dr. R. K. Pathak
No. of Participants   55
Date   14/10/2025
Coordinator   Mrs. M. S. Gahiwad
Students' Chapter   ESTA

o **Industrial visit at Kasturi Multispecialty Hospital, Nashik**

Resource Person   Dr. Prashant Bawa
No. of Participants   45
Date   30/10/2025
Coordinator   Dr. P. J. Mondhe
Students' Chapter   ESTA

❖ Staff achievements

- o Dr. S. P. Agnihotri and Dr. K. V. Karad granted a design patent for title HEXAGONAL SHAPED MMWAVE ANTENNA on 26/08/2025.
- o Dr. M. P. Joshi is recognized as a Ph.D. supervisor in Electronics & Telecommunication Engineering from Savitribai Phule Pune University, Pune.
- o Dr. K. V. Karad granted a utility patent for title A HEXAGONAL SHAPED JEANS MATERIALBASED FRACTAL ULTRA-WIDEBAND ANTENNA on 10/12/2025.

❖ Students' achievements

- o SE E & TC student Ms. Swanandi Shashikant Jadhav completed her 30 days master class in full stack development between 01 July to 04 August 2025.
- o SE E & TC students Ms. Swanandi Shashikant Jadhav competed her international development program on SDG, ESG & Industry innovations between 15 September to 19 September 2025.
- o SE E & TC student Mr. Shreyansh Vijay Vispute completed his one month paid internship at Marval.
- o SE E & TC student Mr. Sahil Pangavhane participated in industry automation nashik between 30 June to 5 August 2025.
- o SE E & TC student Ms. Shraddha Suryawanshi completed her Python using AI workshop on 15 June 2025.
- o SE E & TC student Ms. Shraddha Suryawanshi participated in state level elocution competition in Marathi language on 11-10-2025 organized by ISTE chapter at K. K. Wagh Institute of Engineering, Nashik.
- o TE E & TC student Ms. Kalyani Hemant Kshatriya won first prize of Rs. 25,000/- in SANGAM-Hackathon 2025 on 5 – 6 August 2025.
- o TE E & TC student Ms. Shweta Govind Sonje has completed online research internship at Foreign Policy Research Internship Center from 20 June 2025 to 20 August 2025. She also published two articles during her internship period.
- o TE E & TC student Mr. Atharv Deshpande completed a boot camp on unmanned aircraft system at MET's IoE, Nashik.
- o TE E & TC student Mr. Rohit Gadgil participated in Dhol Pathak at Benguluru.
- o TE E & TC student's Mr. Bhushan Patil & his team secured 3rd rank in Robo Race Competition 2025 held at MET's IoE, Nashik.
- o TE E & TC student Ms. Varunee Pawar is selected as RDCI 2025 & representing 01 MAH AIR SQN Mumbai at New Delhi on 26th January 2026.

- BE E & TC student's Mr. Atharv Zadge & his team won 2nd rank in Avishkar Project Competition held at GES's R. H. S COEMS&R, Nashik
- BE E & TC student's Mr. Laukik Ingale & his team participated in Avishkar Project Competition held at GES's R. H. S COEMS&R, Nashik
- BE E & TC student Mr. Harsh Girase completed a boot camp on unmanned aircraft system at MET's IoE, Nashik.
- BE E & TC student's Mr. Lokesh Mandge & Mr. Aditya Jadhav participated in university level SPPU Nashik zone inter college volleyball men competition on 25th September 2025 & qualified for second round.

❖ **Upcoming Cutting Edge Technologies**

Machine Learning Prediction Model as Advanced tool for Highly Accurate and Fast Prognostication

(Dr. R. K. Pathak)

In current scenario as the demand of highly accurate and fastest prediction of output, Machine Learning (ML) prediction model have become most powerful and advanced tool for analyzing critical dataset and using data cleaning data-driven predictions are done. Unlike traditional statistical methods that often rely on predefined assumptions, ML models learn patterns automatically from historical data and continuously improve as more data becomes available. This makes them highly effective for solving real-world predictive tasks across domains such as healthcare, finance, engineering, education, manufacturing, transportation, agriculture, retail and e-commerce, security and defense, entertainment and media, smart cities, robotics and environmental science.
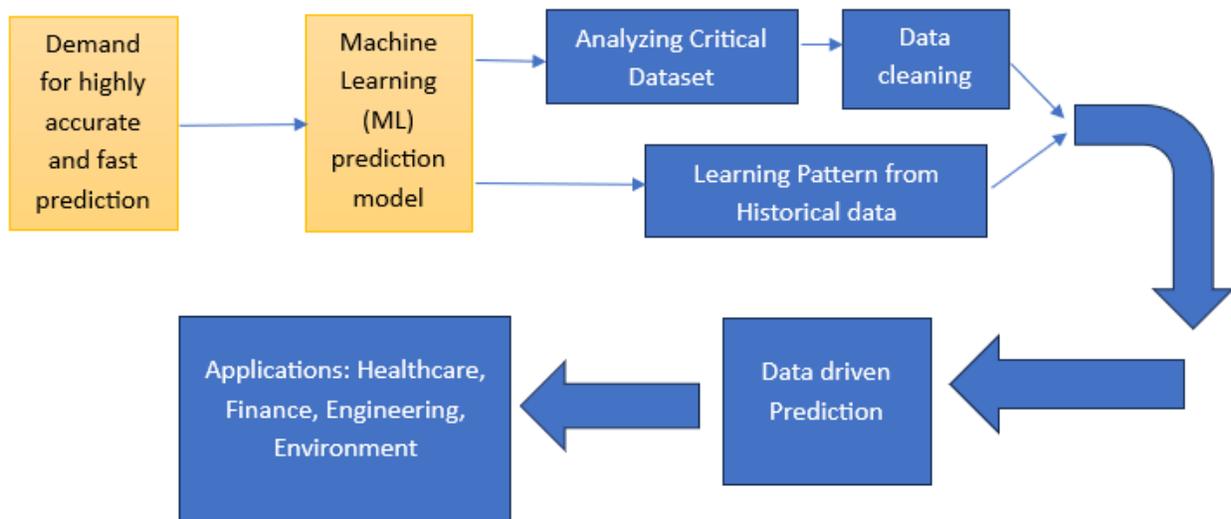

Fig. 1 Block Diagram of ML Model Prediction

Furthermore, the integration of Machine Intelligence (MI) has significantly enhanced the decision-making capabilities of modern systems by enabling them to mimic human-like reasoning, adapt to dynamic environments, and operate autonomously. MI techniques combine machine learning, deep learning, and cognitive computing to deliver intelligent behavior that goes beyond simple pattern recognition. As a result, these systems not only predict outcomes but also recommend optimal actions, detect anomalies in real time, and continuously refine their performance through self-learning mechanisms. This advancement has paved the way for innovative applications across various sectors, driving automation, improving operational efficiency, and supporting complex problem-solving in critical domains.
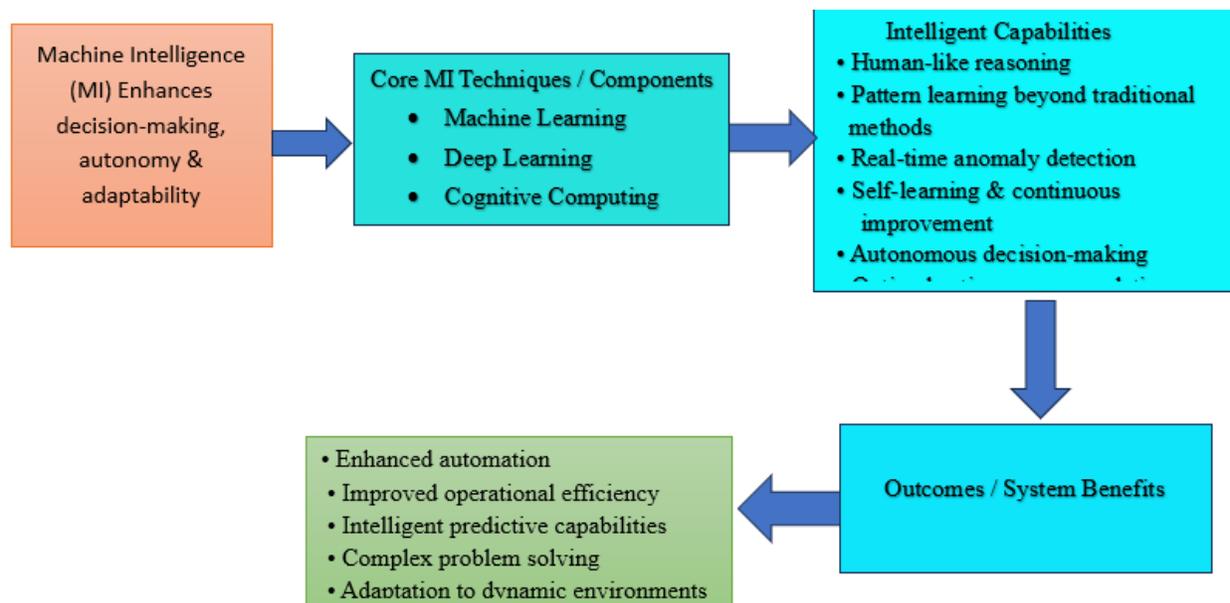

Fig. 2 Block Diagram for Machine Intelligence (MI) with outcomes

In nut shell, the adoption of Machine Intelligence has transformed traditional computational systems into adaptive, autonomous, and highly efficient decision-making entities. By leveraging advanced learning algorithms and cognitive capabilities, MI-driven systems provide deeper insights, faster responses, and more reliable performance across diverse applications. This evolution not only strengthens the precision and scalability of modern technologies but also enables organizations to address complex challenges with greater confidence and intelligence.

Technical Bulletin Team

- ❖ Editor In-Chief: Prof. Dr. Santosh P. Agnihotri, HOD E & TC, GES's RHSCOEMS&R, Nashik
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- ❖ Student Member: Ms. Gauri Patil TE E & TC (Sem-I)

Gokhale Education Society's

R. H. Sapat College of Engineering, Management Studies and Research, Nashik

- Affiliated to Savitribai Phule Pune University, Pune
- ISO 9001:2015 Certified
- NAAC Accredited (B++)

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