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Paper Title	Application of Artificial Intelligence and Machine Learning in Medical Imaging and Diagnostics: A technology review
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Abstract & Keyword	Abstract Artificial Intelligence (AI) and Machine Learning (ML) have significantly enhanced medical imaging and diagnostics by enabling accurate and automated analysis of complex medical data. This review paper explores recent advancements in AI-driven medical imaging, focusing on applications such as anemia classification, brain tumor detection, pulmonary disease diagnosis, breast cancer segmentation, liver lesion identification, and multimodal image fusion. Various AI and ML techniques, including neural networks, fuzzy logic, optimization methods, and hybrid models, are discussed, highlighting their impact on diagnostic accuracy and efficiency. Keywords:- Artificial Intelligence, Machine Learning, neural networks, fuzzy logic, optimization methods
Paper Download Link	https://ijemmr.co.in/wp-content/uploads/2025/03/richa_paper1_pagenumber-2.pdf

Paper Title	A Review on Requirement Anticipation & Stock list Management of Surgical Indefinite quantity
Authors & Affiliation	Satendra Patel1 Gaurav Khare2 Tarun Kumar Yadav3 M. Tech. Scholar, Department of Mechanical Engineering, BTIRT Saga1, M.P. India Department of Mechanical Engineering, BTIRT Sagar2 M.P. India Department of Mechanical Engineering, BTIRT Sagar3 M.P. India
Abstract & Keyword	Abstract Demand prediction and inventory management are essential parts of healthcare supply chain management for ensuring optimal patient outcomes, controlling costs, and minimizing waste. The advances in data analytics and technology have enabled many sophisticated approaches to demand forecasting and inventory control. This study aims to leverage these advancements to accurately predict demand and manage the inventory of surgical supplies to reduce costs and provide better services to patients. In order to achieve this objective, a Long Short-Term Memory (LSTM) model is developed to predict the demand for commonly used surgical supplies. Moreover, the volume of scheduled surgeries influences the demand for certain surgical supplies. Hence, another LSTM model is adopted from the literature to forecast surgical case volumes and predict the procedure-specific surgical supplies. A few new features are incorporated into the adopted model to account for the variations in the surgical case volumes caused by COVID-19 in 2020. Keyword:- Health supply chains, Demand forecasting, Global health, Emerging trends, Risk allocation
Paper Download Link	https://ijemmr.co.in/wp-content/uploads/2025/04/Satendra-Paper-2_ijemmr_march_25_pagenumber.pdf
Paper Title	Reactive Power Compensation Using STATCOM in AC Transmission Lines
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Abstract & Keyword	Abstract Reactive power compensation issues that arise in transmission lines and power-distributed structures have prompted extensive research efforts. These studies have led to the implementation of various strategies, including the use of parallel and series compensation techniques with capacitors to manage reactive power. While these methods improve voltage stability and efficiency, capacitors introduce voltage and current transients, necessitating the adoption of more advanced technologies. This research investigates the implementation of Flexible AC Transmission Systems (FACTS), focusing on the Static Synchronous Compensator (STATCOM) and comparing it with the Static Var Compensator (SVC). Utilizing MATLAB for simulation and analysis, the study explores the operational performance, control strategies, and effectiveness of these devices in both single-phase and three-phase AC transmission lines. The research incorporates PWM-based control strategies and includes mathematical modeling of STATCOM operations, ultimately offering valuable insights into the superior capabilities of STATCOM in dynamic voltage support and reactive power compensation. Keywords: -, STATCOM, voltage conditions, voltage source converter (VSC), energy storage system, Fuzzy logic
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