

# **Medicloud: A Secure and Scalable Cloud Platform for Healthcare**

**Sakshi A. Tambe, Dr Sumit A. Hirve, Vaishnavi Naidu, Shivraj Yadav, Sani Deshmukh**

Students, Department of Computer Science Engineering

Guide, Department of Computer Science Engineering

MIT-ADT University, Pune, India

**Abstract:** *By providing scalable, adaptable, and affordable options for data storage, analysis, and service access, cloud computing is completely changing the healthcare sector. This thorough analysis looks at the function, advantages, difficulties, and potential applications of cloud computing in the medical field. It emphasizes how cloud computing promotes research and development, facilitates telemedicine, assures cost-effectiveness, and improves data management and interoperability. Notwithstanding the advantages, in order to fully realize the potential of cloud computing, issues including data security, regulatory compliance, and system stability must be resolved. Future developments in healthcare could be possible if cloud computing is integrated with cutting-edge technologies like blockchain, artificial intelligence, and the Internet of Things. Cloud computing will have a big impact on healthcare delivery by making more individualized, effective, and worldwide healthcare solutions possible*

**Keywords:** Cloud Computing; Healthcare Technology; Data Security; Artificial Intelligence; Telemedicine

