

A COMPARATIVE STUDY OF CLOUD DEPLOYMENT STRATEGIES FOR GANS: PUBLIC VS. PRIVATE CLOUDS

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ABSTRACT

This paper presents a comparative study of cloud deployment strategies for Generative Adversarial Networks (GANs), focusing on the performance and scalability differences between public and private cloud infrastructures. As GANs continue to drive advancements in various domains such as image generation and data augmentation, understanding the optimal deployment environment becomes crucial for researchers and organizations. The study explores key factors such as cost, security, resource availability, and ease of management in public and private cloud environments. Performance benchmarks and case studies are analyzed to provide insights into the trade-offs associated with each deployment model. The results aim to guide organizations and researchers in selecting the appropriate cloud strategy for deploying GANs based on their specific needs and resources.

KEYWORDS: *Generative Adversarial Networks, Cloud Deployment, Public Cloud, Private Cloud, Scalability, Performance Comparison, Cloud Infrastructure, Machine Learning.*

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