

A Survey of Google Cloud Platform (GCP): Features, Services, and Applications

Praveen Borra

Computer Science

Florida Atlantic University, Boca Raton, USA

pborra2022@fau.edu

Abstract: *This survey paper offers a comprehensive overview of Google Cloud Platform (GCP), examining its extensive range of services, features, and practical applications in various business contexts. GCP is renowned for its diverse offerings in cloud computing, encompassing scalable compute resources, robust storage solutions, advanced machine learning capabilities, and sophisticated data analytics tools. The paper includes a comparative analysis of GCP with other prominent cloud platforms, highlighting its distinctive strengths and strategic positioning in the competitive cloud market. By synthesizing current research and empirical insights, this survey aims to provide a nuanced understanding of GCP's technological advancements, strategic advantages, and implications for enterprises adopting cloud solutions.*

Keywords: Cloud Computing, Google Cloud Platform (GCP), Google Compute Engine, Kubernetes, BigQuery, Machine Learning, Data Analytics, AI Platform, Cloud Storage, and Virtual Private Cloud (VPC)