



# Seven Reasons To Embed Graph Analytics in Your Software Platform

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# Seven Reasons to Embed Graph Analytics

## 1) Graph is recognized as key enabler for growth

“By 2025, graph technologies will be used in 80% of data and analytics innovations, up from 10% in 2021, facilitating rapid decision making across the enterprise”

- Gartner

“Graph Database Market worth \$5.1 billion by 2026”

- Markets and Markets

“Finding relationships in combinations of diverse data, using graph techniques at scale, will form the foundation of modern data and analytics; a remarkably high 92% of organisations it polled also say they plan to employ graph techniques within five years”

- Gartner

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- 1) Graph is recognized as key enabler for growth
- 2) Graph solves new challenges and use cases

## Increase Revenue

- Customer Journey / 360
- Recommendation Engine
- Entity / Identity Resolution
- Marketing Analytics

## Improve Efficiency

- Digital Twins
- Energy Management Systems
- Network Management Systems

## Manage Risk

- Fraud Prevention and Financial Crimes
- Risk Assessment and Monitoring
- Cybersecurity Threat Detection

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- 3) TigerGraph has built in, extendable AI

## Algorithms

- Centrality
  - [PageRank](#)
  - [Article Rank](#)
  - [Betweenness](#)
  - [Closeness](#)
  - [Degree](#)
  - [Eigenvector](#)
  - [Harmonic](#)
  - [Influence Maximization](#)
- Community
  - [Connected Components](#)
  - [K Core](#)
  - [K Means](#)
  - [Label Propagation](#)
  - [Local Cluster Coefficient](#)
  - [Louvain](#)
  - [Speaker-Listener Label Propagation](#)
  - [Triangle Counting](#)
- GraphML/Embeddings
  - [FastRP](#)
  - [Node2Vec](#)
- Path
  - [Astar\\_shortest\\_path](#)
  - [BFS](#)
  - [Cycle\\_detection](#)
  - [Estimated\\_diameter](#)
  - [Maxflow](#)
  - [Minimum\\_spanning\\_forest](#)
  - [Minimum\\_spanning\\_tree](#)
  - [Shortest Path](#)
- Classification
  - [Greedy Graph Coloring](#)
  - [Maximal\\_independent\\_set](#)
- Similarity
  - [Cosine](#)
  - [Jaccard](#)
  - [K Nearest Neighbors](#)
  - [Approximate Nearest Neighbors](#)
- Topological Link Prediction
  - [Adamic Adar](#)
  - [Common Neighbors](#)
  - [Preferential Attachment](#)
  - [Resource Allocation](#)
  - [Same Community](#)
  - [Total Neighbors](#)
- Frequent Pattern Mining
  - Apriori

Some of these, such as Shortest Path and PageRank, have several variations, so the total number is over 50.

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- 4) **TigerGraph is easy to embed**

## Data Integration

- REST API's
- KAFKA
- JDBC

## GSQL Language

## Embeddable Visual Components

## User Defined Functions

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- 5) TigerGraph is scalable, secure, and manageable

## MPP Architecture

- Supports over 1000 nodes in a cluster
- Highest performer on LDBC-SNB 30TB BI SF-30K benchmark

## Manageability

- Multi-zone high availability
- Cross Region Replication
- Single Command Cluster Resizing
- User controlled resource allocation

## Security

- SOC2 compliant
- Multi-Graph capable
- User and Role based access
- OAuth access control

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  - 5) TigerGraph is scalable, secure, and manageable
  - 6) **Deploy TigerGraph on-prem, IaaS, or as SaaS**
- Bare metal installation
  - Kubernetes support
  - IaaS support / marketplace installs
  - TGCloud.io offering TigerGraph SaaS

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- 7) **TigerGraph is a trusted business partner**

We will work with you to fit your needs

- Technology Alliance
- Managed Service Provider
- Embedded Solution Partner

Dedicated Partnership team

Structured partnerships for joint wins



# Let's Join Forces Today

- Join TigerGraph's Connected Partners Program
- Let's start discussing how to embed graph analytics into your software platform
- Let's work together to build successful joint customers

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