Comparative Analysis: Cloud vs Fog vs Edge Computing Models

COMPARATIVE ANALYSIS OF COMPUTING MODELS

| Parameters | Cloud Computing | Fog Computing | Edge Computing |
|--|-----------------------|--|-----------------------------------|
| Latency | *** | ★★★☆☆ | **** |
| Processing Power | **** | **** | ***☆☆ |
| Storage Capacity | **** | **** | ★★☆☆☆ |
| Scalability | **** | **** | ***☆☆ |
| Bandwidth Usage | *** | ★★★☆☆ | **** |
| Energy Efficiency | ★★★☆☆ | **** | **** |
| Security & Privacy | ***☆☆ | **** | **** |
| Cost Efficiency | ** *☆ | *** | ***☆☆ |
| Reliability | PÉRFORMAN | ICE LEGEND | ★★★☆☆ |
| Real-time Capability | ★★☆☆★ Ploár ☆☆ | <mark>Moderaker</mark> ★ ☆★★★☆ Go | ood ★★ ★ ★★★E ★cellent |
| | | | |
| suffers from latency. Edge provides ultra-low latency and privacy but has limited re | | | |

USE CASE RECOMMENDATIONS

CLOUD COMPUTING:

- Big Data Analytics
- Enterprise Applications
 Clobal Web Services
- Backup & Storage
- ML Model Training

FOG COMPUTING:

- Smart Cities
- Industrial IoT
- Video Analytics
- Content Delivery
- Regional Processing

EDGE COMPUTING

- Autonomous Vehicles
- AR/VR Applications
- Industrial Control
- Real-time Gaming
- Healthcare Monitoring
- Drone Operations