Core Technical Skills

- 1. Networking:
 - **TCP/IP, UDP, and other Networking Protocols:** Strong understanding of networking protocols and their implementation.
 - Network Configuration and Management: Experience with configuring routers, switches, firewalls, and load balancers.
 - **VPNs and Secure Communication:** Knowledge of VPN technologies and secure communication protocols.
 - Network Troubleshooting: Proficiency in diagnosing and resolving network issues using tools like Wireshark, tcpdump, etc.
 - **Network Security:** Understanding of network security principles, including encryption, authentication, and intrusion detection systems.

2. Kubernetes:

- **Installation and Configuration:** Experience with installing, configuring, and managing Kubernetes clusters.
- **Containerization:** Proficiency with Docker and other containerization technologies.
- Deployment Strategies: Knowledge of deployment strategies including rolling updates, canary deployments, and blue-green deployments.
- **Helm:** Experience with Helm for managing Kubernetes packages.
- Monitoring and Logging: Familiarity with tools like Prometheus, Grafana, and ELK stack for monitoring and logging Kubernetes clusters.
- Security: Understanding of Kubernetes security best practices, including role-based access control (RBAC) and network policies.

3. MongoDB:

- **Installation and Configuration:** Experience with installing and configuring MongoDB databases.
- **Data Modeling:** Understanding of MongoDB data modeling and schema design.
- Replication and Sharding: Proficiency in setting up and managing MongoDB replication and sharding for high availability and scalability.

- Performance Tuning: Skills in optimizing MongoDB performance through indexing, query optimization, and resource management.
- **Backup and Recovery:** Knowledge of backup and disaster recovery strategies for MongoDB.
- **Security:** Implementation of MongoDB security features, including authentication, authorization, and encryption.

Cloud and Infrastructure Skills

4. Cloud Platforms:

- **Private Cloud and On-Premises Infrastructure:** Experience with both private cloud (e.g., OpenStack) and on-premises infrastructure.
- **Public Cloud Platforms:** Familiarity with public cloud platforms like AWS, Azure, or Google Cloud.
- **Hybrid Cloud Solutions:** Understanding of hybrid cloud architectures and their implementation.

5. Infrastructure as Code (IaC):

• **Automation:** Experience in automating infrastructure deployment and management.

6. Virtualization:

- **Hypervisors:** Knowledge of hypervisors like VMware, Hyper-V, or KVM.
- **Containerization:** Strong skills in containerization technologies beyond Kubernetes, such as Docker.

Soft Skills

7. Problem-Solving and Analytical Thinking:

• Ability to diagnose complex issues in mission-critical environments and implement effective solutions.

8. Communication and Collaboration:

 Excellent communication skills to effectively collaborate with cross-functional teams, including developers, operations, and management.

9. Adaptability and Learning:

• Willingness to continuously learn and adapt to new technologies and methodologies.

10. Project Management:

• Experience in managing projects, including planning, execution, and monitoring.

Certifications (Optional but Beneficial)

11. Networking:

 Certifications like Cisco Certified Network Professional (CCNP) or CompTIA Network+ or similar

12. Kubernetes:

 Certified Kubernetes Administrator (CKA) or Certified Kubernetes Application Developer (CKAD).

13. MongoDB:

• MongoDB Certified DBA or Developer.

14. Cloud:

• AWS Certified Solutions Architect, Microsoft Certified: Azure Solutions Architect, or Google Professional Cloud Architect.