

## 1. Software Developer

### - Key Skills:

1. Proficiency in programming languages (e.g., Python, Java, C++, JavaScript)
2. Knowledge of data structures and algorithms
3. Version control systems (e.g., Git, GitHub, GitLab)
4. Understanding of software development methodologies (Agile, Scrum)
5. Proficiency with databases (SQL, NoSQL)
6. API development and integration (RESTful services, GraphQL)
7. Debugging and troubleshooting techniques
8. Software testing frameworks (e.g., JUnit, Selenium)
9. Cloud platforms and deployment (AWS, Azure, Google Cloud)
10. Continuous integration/continuous deployment (CI/CD) pipelines
11. Familiarity with front-end frameworks (e.g., React, Angular) for full-stack developers
12. Code optimization and performance tuning
13. Writing clean, maintainable, and scalable code
14. Communication skills for collaboration with cross-functional teams
15. Problem-solving and critical thinking

## 2. Systems Administrator

### - Key Skills:

1. Knowledge of operating systems (Linux, Windows, macOS)
2. Server management and configuration (e.g., Apache, Nginx)
3. Networking fundamentals (TCP/IP, DNS, DHCP)
4. Shell scripting (Bash, PowerShell) for automation
5. System monitoring and alerting tools (Nagios, Zabbix, Prometheus)
6. User and group administration in directory services (Active Directory, LDAP)
7. Security best practices (firewall management, access controls)
8. Backup and disaster recovery planning
9. Virtualization technologies (VMware, Hyper-V, KVM)
10. Cloud platforms (AWS, Azure, Google Cloud)
11. Storage management (NAS, SAN, RAID configurations)
12. Troubleshooting and performance tuning
13. Automation tools (Ansible, Puppet, Chef)
14. Documentation and change management
15. Strong communication and collaboration with IT teams

## 3. Network Engineer

### - Key Skills:

1. In-depth knowledge of networking protocols (TCP/IP, BGP, OSPF, EIGRP)
2. Configuration and management of routers and switches (Cisco, Juniper)
3. Network troubleshooting and diagnostics (Wireshark, SolarWinds)
4. LAN/WAN setup and management
5. VPN configuration and management
6. Wireless network administration (Wi-Fi, VLANs)

7. Security protocols (SSL, IPSec, 802.1X)
8. Firewall configuration and management (Cisco ASA, Palo Alto, Fortinet)
9. Network monitoring tools (Nagios, PRTG, Zabbix)
10. Network automation (Python, Ansible, NETCONF)
11. SDN (Software-Defined Networking) and NFV (Network Functions Virtualization)
12. Quality of Service (QoS) and traffic shaping
13. VoIP and telecommunication systems
14. IPv6 implementation and transition planning
15. Excellent troubleshooting and problem-solving skills

## 4. Cybersecurity Analyst

### - Key Skills:

1. Knowledge of security protocols and standards (ISO/IEC 27001, NIST)
2. Understanding of network security (firewalls, IDS/IPS, VPNs)
3. Proficiency in vulnerability assessment tools (Nessus, OpenVAS)
4. Incident response and forensic analysis
5. Penetration testing and ethical hacking (Kali Linux, Metasploit)
6. SIEM (Security Information and Event Management) tools (Splunk, ELK Stack)
7. Encryption standards and secure communication protocols
8. Risk assessment and mitigation strategies
9. Application security (OWASP Top 10, secure coding practices)
10. Compliance with data privacy regulations (GDPR, HIPAA, PCI DSS)
11. Identity and access management (IAM) systems
12. Security awareness training and social engineering defense
13. Knowledge of cloud security (AWS, Azure)
14. Malware analysis and reverse engineering
15. Strong analytical and critical thinking skills

## 5. DevOps Engineer

### - Key Skills:

1. Proficiency with cloud platforms (AWS, Azure, Google Cloud)
2. Continuous Integration/Continuous Deployment (CI/CD) pipelines (Jenkins, GitLab CI)
3. Infrastructure as Code (IaC) tools (Terraform, CloudFormation)
4. Configuration management tools (Ansible, Puppet, Chef)
5. Containerization technologies (Docker, Kubernetes)
6. Version control systems (Git, Bitbucket)
7. Scripting and automation (Bash, Python, PowerShell)
8. System monitoring and logging tools (Prometheus, Grafana, ELK Stack)
9. Cloud security best practices
10. Networking basics for cloud infrastructure
11. Microservices architecture and orchestration
12. Troubleshooting and incident management in production environments
13. Collaboration with development and operations teams
14. Agile methodologies and collaboration tools (JIRA, Slack)
15. Problem-solving and a focus on automation and efficiency

## 6. Data Scientist

### - Key Skills:

1. Proficiency in programming languages for data analysis (Python, R, SQL)
2. Statistical analysis and probability
3. Machine learning algorithms and frameworks (scikit-learn, TensorFlow, PyTorch)
4. Data visualization tools (Matplotlib, Seaborn, Tableau)
5. Data cleaning and preprocessing techniques
6. Big data technologies (Hadoop, Spark)
7. Data mining and pattern recognition
8. Understanding of databases (SQL, NoSQL)
9. A/B testing and experimental design
10. Data-driven decision-making and business intelligence
11. Cloud computing for data processing (AWS, Azure, Google Cloud)
12. Deep learning techniques (CNNs, RNNs, GANs)
13. Natural language processing (NLP)
14. Communication of insights to non-technical stakeholders
15. Critical thinking and problem-solving in data analysis

## 7. IT Project Manager

### - Key Skills:

1. Knowledge of project management methodologies (Agile, Scrum, Waterfall)
2. Proficiency in project management tools (JIRA, Trello, MS Project)
3. Risk management and mitigation strategies
4. Budgeting and cost control
5. Strong communication skills for stakeholder management
6. Task prioritization and resource allocation
7. Leadership and team management
8. Time management and deadline tracking
9. Conflict resolution and problem-solving
10. Vendor and contract management
11. Change management strategies
12. Requirements gathering and documentation
13. Quality assurance and control
14. Adaptability and flexibility in changing environments
15. Proficiency in metrics and performance tracking