Lab Report: Research IT and Networking Job Opportunities

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# Objective

The primary objective of this lab is to perform a comprehensive job search on IT and networking job listings and analyze the various opportunities available in the field. The purpose is to identify key skills and certifications required for the roles, salary expectations, and to reflect on the various career options in the IT industry.

# Background / Scenario

The Information Technology (IT) and Computer Networking industries are experiencing exponential growth. As the demand for network professionals continues to increase, there are numerous opportunities for individuals with industry-recognized certifications, degrees, and skills. The Cisco Certified Network Associate (CCNA) certification is one of the most respected entry-level certifications for networking professionals, with additional levels of Cisco certifications providing career progression.

In this lab, I researched available job opportunities on job listing websites like Monster.com and Salary.com, focusing on the types of IT and networking roles available, the qualification7s required, and the associated salaries.

# Required Resources

• A device with internet access  
• A web browser to visit job listing websites  
• Websites for research: monster.com, salary.com, payscale.com

# Procedure

Step 1: Visit Job Listing Websites

I accessed monster.com and salary.com to search for networking-related job listings.

Step 2: Search for Networking Jobs

I started by searching for job titles such as "Network Administrator," "Network Engineer," and "Cybersecurity Analyst." I refined my search using terms like "CCNA," "CCNP," "Cisco," "Network Security," etc. I also experimented by adding geographic locations to see how job availability varied across different regions.

# Findings

## 1. Job Titles Searched

Based on my search, I found several relevant job titles related to IT and networking:  
- Network Administrator  
- Network Engineer  
- IT Support Specialist  
- Cybersecurity Analyst  
- Cloud Network Engineer  
- VoIP Engineer  
- Network Automation Engineer  
- Security Operations Center (SOC) Analyst

## 2. Skills and Certifications Required

To secure a job in networking, employers typically require the following certifications and skills:  
- CCNA (Cisco Certified Network Associate)  
- CCNP (Cisco Certified Network Professional)  
- CCNA Security / CCNA Voice  
- CompTIA A+ / Network+  
- Routing & Switching  
- Firewall Configuration  
- Linux/Windows Server Management  
- Cloud Certifications (AWS, Azure, Google Cloud)  
- Network Automation Tools (Python, Ansible, SDN)

## 3. Unfamiliar Job Roles Found

Through the research, I discovered some niche job roles in networking that I hadn’t been aware of:  
- VoIP Engineer  
- Network Automation Engineer  
- SOC Analyst

## 4. Jobs of Interest

I found several positions that align with my career goals, including:  
- Cybersecurity Analyst: This role involves protecting the network infrastructure from cyber threats. The required certifications include CCNA Security and expertise in firewall configuration, intrusion detection systems (IDS), and intrusion prevention systems (IPS).  
- Cloud Network Engineer: In this role, professionals design and manage network infrastructure on cloud platforms like AWS, Azure, or Google Cloud. The necessary skills include CCNA/CCNP, cloud certifications (AWS Solutions Architect, Azure Network Engineer), and familiarity with cloud networking.  
- Network Engineer: A broad role involving network design, implementation, and troubleshooting. CCNA/CCNP certifications are required, and knowledge of routing, switching, and security protocols is essential.

# Reflection

## 1. Job Titles Searched

I specifically searched for "Network Administrator," "Network Engineer," "Cybersecurity Analyst," "Cloud Network Engineer," and "VoIP Engineer."

## 2. Skills or Certifications Required

I found that most jobs in networking require certifications like CCNA or CCNP. More advanced roles, especially in cybersecurity and cloud networking, also require specialized certifications, such as CCNA Security, AWS Solutions Architect, or Azure Network Engineer.

## 3. New Jobs Discovered

I discovered roles such as VoIP Engineer, Network Automation Engineer, and SOC Analyst, which I wasn’t previously aware of. These roles focus on specific areas like network security, automation, and telecommunications.

## 4. Jobs of Interest

I am most interested in the Cybersecurity Analyst role, as it aligns with my long-term career goal of working in network security. The Cloud Network Engineer role is also appealing because of the growing demand for cloud professionals. Both roles require knowledge of security protocols and cloud networking, and certifications like CCNA Security and cloud certifications will be beneficial.

# Conclusion

This lab exercise provided valuable insight into the current job market for IT and networking professionals. It highlighted the demand for specialized certifications like CCNA and CCNP, as well as the increasing importance of cloud and security skills in the field. As the networking industry evolves, gaining expertise in emerging technologies such as cloud networking and network automation will be essential for staying competitive.By researching available job opportunities and reflecting on the necessary skills and certifications, I have gained a clearer understanding of the roles that I might pursue in the future.

# References

- [Monster.com](http://monster.com)  
- [Salary.com](http://salary.com)  
- [Payscale.com](http://payscale.com)