KHEM RAJ PANERU

Practical Experience

System & Network Lab Projects – Canadore College

sep 2024 - dec 2024

Mississauga, ON

- Configured routers and switches using Cisco Packet Tracer; implemented VLANs, trunking, and inter-VLAN routing.
- Built and troubleshooted network topologies with static routing, RIP, NAT, DHCP, and subnetting.
- Collaborated in lab teams to identify and resolve **IP conflicts**, **routing loops**, and configuration errors.

Windows Server Administration – College Labs

Apr 2025 - Aug 2025

Mississauga, ON

- Installed and configured Windows Server 2019 with Active Directory, DNS, and DHCP roles.
- Used **Group Policy Objects (GPO)** to manage user environments and enforce security settings.
- Automated administrative tasks like user creation, system updates, and event log collection using PowerShell.

Projects

POS System for Small Cafes (CS50 Final Project)

Python | CSV | Pytest

- Built a lightweight POS system with CSV-based inventory and stock updates.
- Implemented load_inventory(), save_inventory(), and purchase_item() with error handling.
- Created a CLI and unit tests with **pytest** for reliable transactions.

Bitcoin Price Tracker

Python | REST API | JSON

- Built a **CLI tool** to fetch real-time Bitcoin data using the **CoinCap API**.
- Handled API response validation, CLI input processing, and calculated total investment cost.

Cisco Networking Lab Automation

Cisco Packet Tracer | CLI

- Automated VLANs, trunking, and routing setups across multiple lab scenarios.
- Documented lab configurations including DHCP, RIP, NAT, and loopback interfaces.

Remote IT Support Toolkit

PowerShell | Bash | Windows Server | Docker

- Automated user creation, log export, and remote maintenance tasks using PowerShell scripts.
- Tested automation scripts across containers with Docker; integrated logging features.

Technical Skills

Languages: Python, SQL, PowerShell, Bash, HTML, CSS

Networking: VLANs, Subnetting, NAT, DHCP, RIP, OSPF, DNS, Active Directory

Platforms/Systems: Windows 10/11, Windows Server 2016–2022, Ubuntu

Tools: Cisco Packet Tracer, Wireshark, Docker, Git, GitHub, VS Code, VirtualBox, Hyper-V

Admin/Automation: GPO, Event Viewer, RDP, Imaging, Scheduled Tasks

Certifications

- Microsoft Certified: Azure(Az-900) Fundamentals
- CS50: Introduction to Programming with Python HarvardX
- Career Essentials in System Administration Microsoft
- Computer Hardware Basics —Cisco
- Infosys Springboard: Basic of Python
- Microsoft Azure Administrator (AZ-104) ,self study

Education

Canadore College

Diploma in Computer Systems and Networking Technician

Expected Graduation: April 2025

 $Mississauga,\ ON,\ Canada$

• Relevant Courses: Routing & Switching, PowerShell Scripting, Linux, Windows Server, Network Security, Cybersecurity Fundamentals , Azure Administrator