
NICOLE MUSARA

PROFILE

Results-oriented IT professional with expertise in High Performance Computing, Cloud Infrastructure, and Network Systems, currently serving as a Systems Engineer and Business Development Officer at ZCHPC. I play a key role in HPC cloud deployment, infrastructure optimization, and capacity expansion initiatives, while driving client acquisition, onboarding, and technical solution alignment.

I am deeply passionate about architecting advanced computing environments that power AI research, scientific computing, and data-intensive enterprise applications. My strength lies in combining technical execution with strategic thinking, delivering reliable systems, improving operational efficiency, and enabling technology adoption across institutions. Known for strong analytical abilities, effective communication, and the ability to drive complex technical projects from concept to deployment.

EXPERIENCE

SYSTEMS ENGINEER & BUSINESS DEVELOPMENT OFFICER

NOVEMBER 2025-PRESENT

ZIMBABWE CENTRE FOR HIGH PERFORMANCE COMPUTING (ZCHPC)
HARARE, ZIMBABWE

- ❖ Design, deploy, and manage HPC and cloud infrastructure supporting AI training, scientific research, and enterprise workloads.
- ❖ Configure and administer Linux-based server and cluster environments, ensuring high availability, performance, and system resilience.
- ❖ Implement and support virtualization, containerization, and resource management platforms for scalable computing services.
- ❖ Monitor system performance, storage, and network health, performing optimization and proactive troubleshooting to minimize downtime.
- ❖ Contribute to HPC capacity planning, infrastructure expansion, and system architecture improvements.
- ❖ Lead and support client engagement, onboarding, and solution mapping, translating user requirements into tailored HPC and cloud solutions.
- ❖ Provide technical pre-sales support, service demonstrations, and post-deployment consultation for institutional and enterprise partners.
- ❖ Develop and maintain comprehensive technical documentation, SOPs, and infrastructure guidelines.
- ❖ Support cybersecurity and access control implementation within the HPC environment.

RESIDENT INNOVATOR

ZIMBABWE CENTRE FOR HIGH PERFORMANCE COMPUTING (ZCHPC)

JULY 2025 – OCTOBER 2025

HARARE, ZIMBABWE

- ❖ Supported the configuration, installation, and optimization of HPC servers and Linux systems within the national supercomputing environment.
- ❖ Assisted in deploying and testing elements of the HPC Cloud infrastructure, gaining hands-on experience in cluster architecture and system operations.
- ❖ Conducted system monitoring, issue diagnosis, and performance tuning to improve service reliability and uptime.
- ❖ Participated in developing system documentation, deployment procedures, and technical guidelines for Phase I & Phase II HPC infrastructure.
- ❖ Worked closely with senior engineers and architects to implement best practices in high-performance systems administration and operations.
- ❖ Strengthened technical capabilities in enterprise infrastructure management, supercomputing technologies, and large-scale IT environments.

IT TECHNICIAN

WILDTECH SOLUTION

SEPTEMBER 2023 – AUGUST 2024

HARARE, ZIMBABWE

- ❖ Delivered technical support across hardware, software, network, and systems environments for diverse clients in retail and pharmaceutical sectors.
- ❖ Performed system and server checks, security updates, and patching to enhance infrastructure reliability and cybersecurity posture.
- ❖ Assisted with server deployments, workstation configuration, and system troubleshooting, improving operational efficiency for clients.
- ❖ Diagnosed and resolved LAN/WAN connectivity issues, minimizing downtime and restoring critical network services.
- ❖ Participated in backup operations and disaster recovery testing, strengthening business continuity readiness.
- ❖ Maintained detailed incident logs and contributed to a technical knowledge base, improving service desk response times and resolution quality.
- ❖ Provided professional end-user support, improving customer satisfaction and long-term client relationships.

EDUCATION

BACHELOR OF SCIENCE HONORS DEGREE IN INFORMATION

Chinhoyi University of Technology - Chinhoyi, Zimbabwe

(Merit: 2.1: B+) 2021-2025

MASTER OF TECHNOLOGY DEGREE IN DATA SCIENCE AND ANALYTICS

Harare Institute of Technology - Harare, Zimbabwe

August 2025- Present

CAMBRIDGE ORDINARY LEVEL & ADVANCED LEVEL

SKILLS

- ❖ Linux Server Administration (Ubuntu, CentOS), Windows Server
- ❖ HPC & AI Cluster Development and Management
- ❖ Virtualization (VMware, Hyper-V, Proxmox)
- ❖ Microsoft Azure | AWS (Exposure)
- ❖ Docker | Kubernetes
- ❖ TCP/IP | LAN/WAN | DHCP | DNS
- ❖ Network Troubleshooting
- ❖ Firewall & VPN | Cybersecurity Fundamentals
- ❖ Backup & Disaster Recovery
- ❖ Python | Bash Scripting | R
- ❖ SQL (MySQL, SQL Server, PostgreSQL) | NoSQL (MongoDB, Cassandra)
- ❖ Data Analytics & Visualization (Pandas, NumPy, Matplotlib, Power BI, Tableau)
- ❖ Machine Learning & AI Workflows (scikit-learn, TensorFlow basics)
- ❖ System Monitoring & Performance Optimization
- ❖ Hardware & Systems Troubleshooting

AWARDS

EC-Council Certified Cybersecurity Technician (C|CT) Scholarship

REFERENCES

1. Mitchell Ringoziwa

Helpdesk Administrator – WildTech Solutions

mringoziwa@wts.co.zw

+263 78 956 6715

2. Raymond Zenda

Deputy Director – Applications, ZCHPC

+263 77 635 8507

3. Marvellous Tshuma

Lecturer– Chinhoyi University of Technology

+263 78 409 9584