

ARISTHIDE DJIDJOU NOBANZA

Senior Communications & Systems Engineer | Technical Support Engineer | IT Systems Administration

Transit Communications • Digital Modernization • Infrastructure Reliability

 Silver Spring, MD

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PROFESSIONAL SUMMARY

Senior Communications and Systems Engineer with 12+ years of experience supporting and modernizing mission-critical transit communications, security, and low-voltage infrastructure. Lead Communications Technician and Acting Supervisor at WMATA responsible for CCTV, PERS, public address, access control, networked kiosks, and passenger information systems across multi-facility environments.

Certified **Technical Support Engineer (2024)** and **Professionalism Certificate graduate (2025)** with formal training in **Linux, Windows Server, cloud fundamentals, networking, and systems administration**, currently completing a **Bachelor of Science in Information Technology**. Recognized for designing scalable environmental monitoring and smart-cooling solutions that improve infrastructure reliability and predictive maintenance. Combines hands-on field engineering with systems-level analysis, leadership, and disciplined documentation.

CORE TECHNICAL COMPETENCIES

Communications & Low-Voltage Systems

CCTV • Public Address • PERS • Passenger Information Displays • Kiosk Systems • Access Control • Fire Alarm Interfaces • RF & Communications Interfaces • Fiber Optics (ISP/OSP)

Systems Engineering & Modernization

Requirements Analysis • Stakeholder Engagement • Design Criteria • Proof-of-Concept

Development • Factory & Site Acceptance Testing (FAT/SAT) • Commissioning • As-Built Validation

IT & Infrastructure

Linux • Windows Server • AWS & Azure Fundamentals • PowerShell • SQL • Data Analytics
• Maximo CMMS • Virtualization • Network Fundamentals

Embedded & Applied Engineering

PIC & ESP Microcontrollers • Sensor Integration (Temperature, Humidity, Motion) • OLED & HMI Displays • UART/Serial • PCB & Prototype Validation

Leadership

Crew Supervision • Safety Compliance • Technical Mentorship • Documentation • Cross-Department Coordination

PROFESSIONAL EXPERIENCE

Lead Communications Technician / Acting Supervisor

Washington Metropolitan Area Transit Authority (WMATA) — Washington, DC

Apr 2013 – Present

- Lead technician for communications and low-voltage infrastructure supporting CCTV, PERS, public address, access control, passenger information displays, kiosks, switches, and fiber networks across multiple WMATA facilities.
- Provide Acting Supervisor coverage by coordinating technicians, prioritizing work orders, conducting safety briefings, and ensuring compliance with Authority maintenance standards.
- Collaborate with Engineering, IT, Construction, and Maintenance to support troubleshooting, commissioning, system upgrades, and documentation review.
- Conduct site surveys, validate as-built conditions, and support installation and decommissioning of communications equipment.

Key Engineering & Modernization Contributions

- Designed and implemented **EnviroLink**, a custom **Environmental Monitoring & Smart Cooling System**, to address recurring temperature and humidity failures impacting communications rooms and field equipment.

- Standardized environmental measurements, thresholds, and troubleshooting workflows, significantly reducing recovery time for CCTV, PERS, kiosk, and network outages.
 - Developed scalable proof-of-concept solutions integrating sensors, embedded controllers, dashboards, alerting, and historical analytics aligned with WMATA's Maintenance Control Plan and digital modernization objectives.
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Communications Systems Maintenance Intern

WMATA — Fall 2025

CAR 398 – Work-Based Learning

- Analyzed systemic communications room environmental issues affecting reliability and uptime.
 - Authored and demonstrated a scalable Environmental Monitoring & Smart Cooling System supporting early detection of temperature, humidity, and motion anomalies.
 - Coordinated with supervisors and technicians during maintenance activities, strengthening documentation quality and operational efficiency.
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Data Analyst (Junior Analyst)

Global Health Liaisons, LLC — Silver Spring, MD

2016 – 2017

- Supported UNICEF's **Enhance Resilience Karamoja Programme (ERKP)** across seven districts.
 - Managed large-scale health and nutrition datasets and configured CommCare mobile data-collection systems.
 - Recognized in UNICEF's published evaluation report as **“Aristhide Nobanza, Junior Analyst.”**
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Mechanical Electrical Technician

Mastech Engineering — Washington, DC

Jan 2012 – Jan 2014

- Performed HVAC, electrical, and control-system maintenance at Ritz-Carlton, Fairmont Hotel, and Marriott Private Residences.
 - Serviced motors, transducers, circuit boards, cooling towers, boilers, and environmental control systems.
 - Highlighted Project: **HVAC Control System Modernization** improving operational reliability.
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Lead Electronics Bench Technician

Express Union — Yaoundé, Cameroon

Jun 2008 – Nov 2011

- Led electronics and IT repair operations across Congo, Chad, and Central African Republic.
 - Designed GSM-based intrusion detection systems and executive communication modules using PIC microcontrollers.
 - Trained technicians and standardized diagnostic and maintenance procedures.
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EDUCATION

Bachelor of Science — Information Technology

Brigham Young University–Idaho | *Expected July 2026*

Associate Degree — Electrical & Electronics Engineering

Université de Dschang | *SpanTran Evaluation, Aug 2023*

Baccalaureate Diploma (U.S. High School Equivalency)

Cameroon Ministry of Secondary Education

CERTIFICATIONS & ACADEMIC CREDENTIALS

Ensign College / BYU–Idaho

- **Technical Support Engineer Certificate (2024)**
- **Professionalism Certificate (2025)**
- **IT Fundamentals Certificate (Expected 2026)**

- **Systems Administration Certificate (Expected 2026)**

Industry Certifications

TestOut: PC Pro, Network Pro, Security Pro, Client Pro, Hybrid Server Pro

LinkedIn Learning: SQL Server 2022, Power BI, Tableau, Data Analytics

SIMnet: Excel White Belt, Excel Yellow Belt

GoSkills: Microsoft Access

Other

Valid U.S. Driver License • RWP Level 4

LANGUAGES

English — Fluent

French — Fluent (Professional & Technical)

SELECTED PROJECT

EnviroLink — Environmental Monitoring & Alerting System (WMATA Proof-of-Concept)

- Embedded sensors with OLED HMI
 - Real-time dashboards and historical analytics
 - Email alerting with rate-limiting
 - Predictive maintenance support
(Full technical write-up available at elevatewithnobanza.com)
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