

Dwamena Cyril Osei

Email: cdwamena@ttu.edu | Phone: +1(806)-544-5937

LinkedIn: [linkedin.com/in/cyril-dwamena-osei-b6a2262a1](https://www.linkedin.com/in/cyril-dwamena-osei-b6a2262a1) | Portfolio: cyriloseiporfolio.netlify.app

EDUCATION

Texas Tech University – Lubbock, TX

Bachelor of Science in Electrical Engineering

GPA: 3.75/4.0 | Expected Graduation: May 2027

Relevant Coursework: Digital Signal Processing, Circuit Analysis, Microprocessors, Controls and Embedded Systems, AI/ML, Power Electronics

TECHNICAL SKILLS

Programming Languages: C, C++, Python, MATLAB, Verilog, SQL

Software & Tools: Figma (UI/UX), LT-Spice, Proteus, Tableau, Git, SolidWorks

Hardware & Embedded: Arduino, Raspberry Pi, MSP430, TCS3200 Sensors, Servo Motors

Technologies: Network Configuration, System Administration, Database Management

Communication Protocols: UART, SPI, I2C

Data & Design: Statistical Modeling, Data Visualization, Circuit Design, PCB Layout

PROFESSIONAL EXPERIENCE

IT Supervisor and Technical Analyst, IT Help Central – Texas Tech University, Lubbock, TX

July 2024 – Present

- Supervise team of 6 student technicians while providing advanced technical support to 300+ students and faculty, maintaining 95% resolution rate on complex hardware/software issues
- Lead weekly team meetings and training sessions, improving overall department efficiency by 40% through standardized troubleshooting protocols
- Architect and implement network infrastructure upgrades, resulting in 50% improvement in campus-wide connectivity speeds and 99.5% uptime
- Develop automated ticketing system using Python scripts, reducing average issue resolution time by 45% and improving customer satisfaction scores to 4.8/5.0
- Manage enterprise-level system deployments including Active Directory, network security configurations, and database administration

Region 5 Director, IEEE Student Section – Texas Tech University

February 2024 – December 2024

- Directed strategic initiatives for IEEE student engagement, achieving 35% increase in membership through targeted outreach and professional development programs
- Coordinated 15+ technical workshops and industry seminars, facilitating networking opportunities for 250+ students with Fortune 500 engineering professionals
- Managed \$8,000+ annual budget for regional events, ensuring cost-effective execution of all programs while maintaining high-quality standards

TECHNICAL PROJECTS

- Autonomous Line-Following Robot System:** Programmed and tested a robot using the MSP430FR6989 microcontroller, integrating IR sensors for path detection and ultrasonic sensors for obstacle avoidance. Implemented UART-based communication in C for sensor data handling and motor control, enabling real-time navigation
- Real-Time Data Processing Pipeline:** Engineered a multi-threaded Python application utilizing pandas and NumPy to process and visualize 1M+ data points in real-time, implementing advanced algorithms that reduced computational complexity by 60% and analysis time by 50%
- Automated Color Sorting System:** Designed and programmed an Arduino-based industrial sorting system using TCS3200 color sensors, servo motors, and custom C++ algorithms, achieving 98% accuracy in object classification with real-time processing capabilities
- Network Performance Monitoring System:** Built comprehensive network analysis tool using Python and SQL, monitoring campus network traffic patterns and generating automated reports that identified and resolved 12 critical bottlenecks

Portfolio: [View Portfolio](#) (includes video demonstrations of completed projects)

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- JPMorgan Chase Software Engineering Job Simulation (Forage):** Completed hands-on tasks in project setup, Kafka integration, H2 database integration, REST API development, and REST API controller implementation
- Intro to Machine Learning (Kaggle):** Successfully completed comprehensive course covering machine learning fundamentals, model development, and data analysis techniques
- PCB Design with KiCad (Udemy) - In Progress:** Developing proficiency in PCB layout, schematic design, component placement, and design rule checking for electronic circuit boards