

EDUCATION

Rice University - Houston, Texas (GPA 4.0)

Jan 2025- May 2026

Master of Engineering Management and Leadership, Energy Transition and Sustainability

Harare Institute of Technology- Harare, Zimbabwe (GPA 3.8)

Aug 2019- Oct 2023

Bachelor of Technology in Polymer Technology and Engineering

PROJECTS

AgriPrec Start-up – Tex-E (Texas Exchange for Energy & Climate Entrepreneurship)

Oct 2025

- Developed drone AI system for smarter, low-emission fertilizer application, costs and greenhouse emissions.

Leveraging Data Science to Predict and Prevent Manufacturing Defects – Rice University, Houston, Tx

Jan 2025- May 2025

- Created a data-driven Machine Learning model to predict and prevent manufacturing defects using KMeans clustering.

Defect detection Robotic arm, Harare Institute of Technology - Harare, Zimbabwe

2023 - 2024

- Designed and fabricated a robotic arm for wall thickness variation detection in Polyethylene Terephthalate (PET) bottles in a PET blow molding plant based on material ultrasonic waves absorption

WORK EXPERIENCE

Rice University, Rice Centre for Engineering Leadership (RCEL), Houston, TX

Student Co-Chair, Rice Global Forum (RGF)

Aug 2025-May 2025

Premier Rice University consortium in the energy industry that fosters thought leadership, networking, and professional development through events like its Annual Forum, roundtables, scholarships, and student engagement programs.

- Attended and contributed to monthly Executive RGF board meetings, in program planning, event budgeting, and stakeholder management, enhancing student-industry engagement from 20% in Q1 to 100% in Q3.
- Coordinated energy sector roundtable event and the Careers in Energy transition night at Rice, linking students with potential mentors and employers.

Teaching Assistant, Data Science for Engineers,

Aug 2025-May 2025

- Managed and supported student research projects, improved course materials and facilitated student- led training workshops on Generative AI, GitHub portfolios and 3D printing, as well as managing grading and office hours for 40 students per semester.

Assistant Coordinator, Rice Elite Tech Summer Camp

June 2025- Aug 2025

- Oversaw and coordinated daily program logistics, equipment, and supplies for 8 STEM camp modules, ensuring smooth daily operations for 500 students over 5 weeks during summer, ensuring 100% program delivery within budget.

Driptech Irrigation, Harare, Zimbabwe

Jan 2022 – Dec 2024

Plastics manufacturing company focusing on irrigation pipe manufacture

Quality Control Manager, Driptech Irrigation,

Feb 2024 - Dec 2024

- Oversaw the maintenance of the Quality Management System in accordance with ISO 9001:2015, leading a team of 5 Engineers achieving 50% reduction customer complaints in the first 8 months of employment.
- Managed the Quality Control and Assurance inspections for 12 production lines, manufacturing over 10 types of polymeric pipes including conduits and sewer pipes.
- Conceptualized, led and established the Research and Development department, successfully expanding the PVC pipe product Range (450mm – 1000mm) using the in-line innovation processing technique, driving market growth and aligning with national water infrastructure needs.
- Led bi-annual ISO 9001:2015 internal audits, overseeing scope, planning, reporting, and coordinating with suppliers, technicians and management for product compliance and process control.

Quality Control Graduate Engineer,

Nov 2023 - Jan 2024

- Initiated raw material quality and cost control by optimizing masterbatch use saving the company \$400,000 annually, updated QC testing procedures and technical documentation (SOP) ensuring audit readiness and workflow standardization.
- Led new QC employee lab trainings, calibrated lab test machines and analyzed equipment efficiency to reduce losses.

Engineering Intern,

Jan 2022 - July 2022

- Developed a machine spares supply chain tracking system using SAP, resulting in a 35% improvement in maintenance turnover time.
- Responsible for raw material testing for low- and high-density Polyethylene before processing

LEADER, VOLUNTEER AND PROFESSIONAL MEMBER

Boards – Zimbabwe Institution of Engineers (Young Professionals Secretary), American Society for Mechanical Engineers (Universities Outreach Chair)

Volunteer – Student Connect Trust (Assistant Programs Manager), Collaborative for Children

Member- NSBE Houston Professionals, Society for Women Engineers (SWE), American Society for Engineering Managers

REGIONAL AND INTERNATIONAL AWARDS

- 2nd place - *ASEM Annual Case Study Competition* (Project Leadership)
- NSBE Houston Professionals Scholarship for Academic Excellence
- Vice Chancellor's Prize for the Best Graduating Student in Polymer Technology and Engineering
- HIT Book Prize for the Best Capstone Design Project
- UNESCO/ ECSA (Engineering Council of South Africa) best SDG 9 poster competition project in Africa

Sept 2025

June 2025

Oct 2023

Oct 2023

Sept 2023