Adeyemi Mosopefoluwa Deborah

Mechanical Engineering Graduate | Certified SOLIDWORKS Design Associate (CSWA)
Piping and Plant Design | Predictive Maintenance Analytics

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SUMMARY

Mechanical Engineering graduate from Covenant University and Certified SOLIDWORKS Design Associate, specializing in 3D piping design, plant layout engineering and predictive maintenance analytics. Technical foundation in industrial 3D CAD modeling, plant drafting and pressure vessel analysis using AutoCAD Plant 3D, Navisworks and PV Elite.

EXPERIENCE

Mechanical / Piping Engineering Intern | NNPC Engineering and Technical Company Limited (NETCO), Victoria Island, Lagos
March 2025 to September 2025

- Produced 3D piping layouts for oil and gas infrastructure, including the Ohaji Gas Project, by modeling in AutoCAD Plant 3D.
- Carried out model reviews and clash detection checks in Navisworks so designs stayed within engineering standards.
- Supported senior piping engineers with design calculations, drawing reviews and project documentation control.

Intern | Formula 1 Automotive Nigeria Limited, Nigeria
August 2024 to September 2024

- Assembled and tested automotive parts to ensure quality and performance.
- Worked with senior technicians to diagnose vehicle faults and implement solutions.
- Conducted routine maintenance checks and repairs to maintain engine performance.
- Used diagnostic tools to support vehicle troubleshooting.
- Contributed to team discussions and technical activities.

Founder and Operations Manager | Morakin, Lagos, Nigeria
February 2026 to present

- Direct operational, administrative and inventory management workflows.

PROJECTS AND RESEARCH

- **Manufacturing Equipment Failure Prediction (final year project):** Predictive maintenance model using Random Forest machine learning on equipment sensor data to forecast failures.
- **3D Aircraft Assembly (Autodesk Inventor):** Modeled a complete multi-part aircraft assembly using parametric CAD features.
- **Mobile Seed Planter (UN SDGs alignment):** Co-designed a lightweight, GPS-tracked mobile seed planter with soil moisture and nutrient sensors.
- **Solar Cooker:** Thermal design calculations and workshop fabrication of a working prototype.

EDUCATION

Bachelor of Engineering, Mechanical Engineering | Covenant University, Ota, Nigeria
November 2021 to August 2026

SKILLS

- **CAD and plant design:** AutoCAD Plant 3D, Navisworks, SolidWorks, PV Elite, Autodesk Inventor, AutoCAD.
- **Engineering:** Piping design, 3D modeling, plant equipment layout, technical document control.
- **Analytics:** Predictive maintenance analytics, Random Forest modeling, prompt engineering.

CERTIFICATIONS

- Certified SOLIDWORKS Design Associate (CSWA), Dassault Systèmes, December 2025.
- PV Elite Training, Hexagon, March 2025. Introduction to PV Elite.
- Prompt Engineering, OBTranslate.

LEADERSHIP AND SERVICE

- Follow-Up Sub-Unit Head, Covenant University Ushering Unit (2025 to 2026).
- Assistant General Secretary and Head of Database Team, Covenant University Ushering Unit (2023 to 2024).
- Course Representative, Mechanical Engineering Department, Covenant University.