OKOLAI OTONBARA ALFRED

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SKILLS

CAD: AutoCAD, SketchUp, Tekla TEDS
GIS: QGIS
Hydraulic Software: EPA SWMM

EDUCATION

Bells University of Technology – BEng in Civil and Environmental Engineering   **Feb 2021 – Feb 2025**

EXPERIENCE

Civil Engineering Intern, Eretek Engineering Nigeria Ltd. – Yenagoa, Nigeria   **July 2023 – Dec 2023**

- Supported the supervision of a 4km stormwater drainage and 2km road network for NDPHC
- Reviewed construction drawings, monitored progress, and performed quality and safety checks.
- Collaborated with engineers and foremen on planning, materials, and contractor performance.

Civil Engineering Intern, Koe Procurement and Services Ltd. – Yenagoa, Nigeria   **Aug-2022 – Jun 2023**

- Contributed to the successful delivery of an estate development project comprising 40 units of 5-bedroom, one-storey duplexes.
- Assisted with site layout, reinforcement placement, and structural work, gaining hands-on construction supervision experience.
- Collaborated with contractors, site engineers, and labor teams to maintain project timelines and meet quality benchmarks, supporting efficient project progress.

PROJECTS

Leveraging GIS and SWMM With Low Impact Development Techniques To Improve Urban Drainage and Flood Mitigation: A Case Study of Opolo Housing Estate, Bayelsa State – View Full Report on LinkedIn

- Developed a sustainable drainage retrofit strategy using QGIS and EPA SWMM to model stormwater behaviour and evaluate Low Impact Development (LID) solutions.
- Simulated baseline and LID scenarios (permable pavements and rain barrels), achieving an 85-87% reduction in peak runoff and flow volumes.
- Integrated geospatial and hydrologic-hydraulic modelling to assess drainage efficiency and flood resilience.
- Proposed practical LID-based design reccomendations for urban flood mitigation in tropical regions.