

OPERATIONAL REPORTING AUTOMATION PIPELINE

Project Summary

Replaced manual recurring report preparation with a scheduled Python and SQL pipeline for cleaner inputs, repeatable transforms, and predictable delivery windows.

Work Context

At FUTA (Systems & Data Analyst / System Programmer, 2017-2023), this pipeline model supported recurring leadership updates for admissions throughput, examination operations, and results readiness.

Current Implementation

I continue the same model with config-driven runs and scheduled workflow wrappers to maintain timing and output consistency.

Results and Impact

- Time saved: 8 hours per week
- Recurring reports generated: 40+
- On-time delivery for scheduled runs: 100%

Deliverables

- ETL scripts: <https://github.com/toughdave/scripting/tree/main/scripts/python/etl>
- ETL runner: 'scripts/python/etl/etl_runner.py'
- Workflow scheduler: 'scripts/workflow/schedule_daily_run.sh'

Technical Notes

- Pipeline checkpoints: extract validation, transform checks, output integrity checks.
- Artifacts are timestamped to support run tracking and operational handoff.