SEAN LUKA GIRGIS

seanlgirgis.github.io | 214-315-2190 | seanlgirgis@gmail.com | GitHub | LinkedIn

Enterprise ML Engineer & Time-Series Specialist with 20+ years of technical leadership. Specialist in deploying high-performance **Predictive Capacity Pipelines** for 10,000+ servers. Expert at bypassing the Python GIL to achieve **10x forecasting throughput**.

CORE ML ENGINEERING PILLARS

Predictive Engineering

- **Advanced Forecasting**: Prophet, LSTM, XGBoost.
- **High-Performance Data**: Feature extraction from Parquet/Spark.
- **Visualization**: Interactive Streamlit dashboards.

MLOps & Strategy

- **Model Competition**: Automated champion/challenger selection.
- **Confidence Modeling**: "High Trust" 90-day utilization logic.
- **Domain Expertise**: BMC TrueSight & AppDynamics synthesis.

FLAGSHIP PROJECT: HORIZONSCALE AI

Predictive Utilization Pipeline (2,000+ Nodes)

- **Turbo Prophet**: Parallel execution framework reducing cycles by **90%**.
- **High-Fidelity Training**: 3-year historical synthetic foundation.
- **Interactive Dashboard**: 6-month outlooks vs. historical baselines.

`Python` `Prophet` `Streamlit` `Spark` `Multiprocessing`

PROFESSIONAL EXPERIENCE

Capacity and Performance Consultant (ML & Strategy)   2017 – Dec 2025
CITI

- Architected big-data forecasting for 10,000+ global servers.
- Automated regional forecasting, reducing manual analysis by **85%**.
- Used BMC TrueSight and AppDynamics for proactive outage detection.

Performance Engineer   2017 – 2017
G6 Hospitality LLC & HCL/ENTERGY

- Managed end-to-end monitoring for Brand.com using Dynatrace AppMon and Synthetics.
- Led the "FAST" project, data mining user performance metrics to optimize critical money-generating systems.

Senior Consultant (CA APM Consulting)

CA Technologies & TIAA-CREF

- Led enterprise CA APM implementations and upgrades (v9.1 → v10.1) for financial clients, managing 4,000–6,000 agents across multi-cluster environments.
- Served as CA APM SME, handling daily operations, cluster maintenance, agent/Power Pack rollouts, and performance bottleneck resolution in J2EE/.NET stacks.
- Designed custom dashboards, alerts, reports, and Perl/Ksh data-extraction scripts to deliver actionable insights for business-critical monitoring.
- Provided architectural sizing recommendations, Golden Image creation, client training, and technical team leadership for APM deployments.
- Optimized large-scale CA Wily Introscope installations, resolving complex issues in high-stakes financial services environments.

EXPERIENCE HISTORY

AT&T

2010 – 2011

Senior performance Test Engineer

Sabre

2008 – 2012

Senior Developer - C++, Java, Backend Architecture

Software Engineer

2000 – 2008

Full-Stack Development

EDUCATION & CERTIFICATIONS

Post-Graduate Diploma, Computer Science

Humber College

Bachelor of Science, Engineering

Zagazig University