SEAN LUKA GIRGIS

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CORE COMPETENCIES & EXPERTISE

Modern Stack

- Python (Pandas, Scikit-Learn), ML Forecasting (Prophet), RAG Architectures, Spark, AWS Cloud.

Infrastructure & APM

- BMC TrueSight, AppDynamics, CA APM (Wily), Dynatrace, Capacity Optimization.

Legacy Engineering

- C/C++, Java/J2EE, Pro*C, Unix (HPUX, Solaris, AIX), Shell Scripting, Oracle/SQL.

PROFESSIONAL EXPERIENCE

CITI
Senior Performance & Capacity Consultant

Nov 2017 – Dec 2025

- **AI-Driven Forecasting:** Developed ML models using Python and scikit-learn to predict infrastructure requirements 3-6 months in advance.
- **Data Pipelines:** Built automated ETL pipelines to extract and process metrics from BMC TrueSight and AppDynamics for 10,000+ nodes.
- **HorizonScale:** Led the transition from "Trenda" legacy scripts to a parallelized, high-throughput forecasting engine.
- **Cost Optimization:** Identified underutilized patterns, leading to significant hardware consolidation and budget savings.
- **Administered and configured BMC TrueSight:** Optimized platform, setting thresholds, alerts, baselines, and integrating data for proactive resource management across diverse applications.
- **Built automated Python/pandas data pipelines** extract, cleanse, and consolidate capacity metrics from BMC TrueSight into centralized analytics for accurate forecasting and reporting.

G6 HOSPITALITY LLC
Performance Engineer

Mar 2017 – Nov 2017

- 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.
- Upgraded DynaTrace from v6.5 to v7.0, enforced TLS 1.2 security, and integrated Performance Center with DynaTrace.
- Implemented custom dashboards, alerts, and reports for business-critical monitoring.
- Supported cloud migration to AWS, evaluated mobile monitoring tools, and delivered before/after dashboards for performance tracking.
- Optimized large-scale DynaTrace installations, resolving complex issues in high-stakes financial services environments.

HCL / ENTERGY
APM Consultant

Jan 2017 – Mar 2017

- Supported enterprise-wide CA APM, CEM, and ADA solutions for utility grid systems.

CA TECHNOLOGIES

Senior Consultant

- Led planning, implementation, and upgrades of CA APM solutions for enterprise clients, ensuring seamless integration and performance scalability.
- Reviewed client architectures, provided sizing recommendations, and optimized agent/Enterprise Manager installations for maximum efficiency.
- Designed and deployed custom Management Modules, including advanced reports, alerts, and dashboards tailored to business needs.
- Delivered client training, knowledge transfer, and comprehensive documentation to enable long-term self-sufficiency in CA APM operations.

ENTERPRISE IRON (TIAA-CREF)

Aug 2011 – Dec 2013

SME for CA APM

- Served as CA APM SME for TIAA-CREF, managing day-to-day operations of a large-scale enterprise environment with 4 regions, 50+ Enterprise Managers, and ~4,000–6,000 agents.
- Led upgrade of CA Wily Introscope from v9.1 to v9.50, ensuring minimal disruption across multi-cluster financial services infrastructure.
- Designed and implemented custom Management Modules, including specialized dashboards, alerts, reports, and Perl/Ksh data-extraction scripts for business-specific insights.
- Oversaw agent installations, Power Pack deployments, and cluster maintenance (e.g., resolving clamps) to maintain high-availability monitoring.
- Collaborated with IT teams to troubleshoot performance issues in J2EE/WebLogic/WebSphere environments, leveraging JMX monitoring for bottleneck resolution.

AT&T

Aug 2010 – Jul 2011

Telecom Applications Performance Testing

- Analyzed performance of J2EE telecom web applications to identify optimal loads, break points, and resource bottlenecks.
- Documented key metrics (JDBC connections, threads, memory, CPU, GC) and installed JMX Monitoring, Thread Dumps, and Wily Introscope.
- Created and modified automation/testing scripts for performance validation.

SABRE

May 2008 – Jan 2010

Senior Software Engineer (C++)

- Designed and implemented high-performance conversion of global travel Shopping Engine from MySQL to Oracle, reducing server footprint dramatically.
- Converted SQL queries, achieved superior DSS performance, and automated conversion process.
- Built testing framework using CPPUNIT in C++/OCCI/OCI environment.

Computer Science Corporation (CSC)

OCT 2007 – May 2008

Architect/Developer

- Performed UML-based unit design, created class/sequence diagrams, and developed modules for IRS modernization.
- Worked on CICS/MQSeries/XML messaging architecture with VC++ and DB2.

Corpus Inc. (CenturyTel -AT&T)

May 2005 – Oct 2007

Developer / Support Engineer (AMDOCS telecom billing systems)

- Delivered performance enhancements in billing processes (C/C++/Pro*C/PL/SQL), reducing memory usage 75% and improving throughput 20%.
- Developed and troubleshot Flexible Bill Formatter, EDI interfaces, and Enabler/EMS/CSM modules.
- Automated system administration tasks (WebLogic/WebSphere) with Korn Shell scripts, saving 60% reboot time.

Sprint

2001 – 2005

High Availability Interfaces - C++, POSIX Threads, Marconi APIs

- Developed high-availability multithreaded interfaces (C++/POSIX threads/sockets/IPC) for EAMS/AMS-PRMS integration.
- Led PRMS maintenance, upgrade (PowerBuilder → Web), and enhancements; improved DB performance 10x via PL/SQL optimizations.
- Reverse-engineered AMDOCS APIs, implemented interfaces, and supported CSM production troubleshooting.

Simplex International - Canada

1999 – 2001

Developer

- Developed interfaces and MRC to the time and attendence system using VB6.
- Developed extension for Client GM on the security and alert system Using VC++.

EDUCATION & CERTIFICATIONS

- **High Diploma: Computer Engineering Technology** - Humber College, Canada
- **Bachelor of Science: Civil Engineering** - Zagazig University, Egypt
- Brainbench Certified: C++ Fundamentals, Java 2.0, OOD, C, and Mathematics.