

SOKRATIS TSOUPLAKIS

Senior Core Voice Network Engineer | Observability, Data Engineering & AI-Driven Telecom Operations

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Location: Greece



EXECUTIVE PROFILE

Senior Core Voice Network Engineer with 25+ years of telecom experience, actively hands-on with Machine Learning & Data Science since 2021. Bridges deep Core Voice domain expertise with modern enterprise observability, high-volume data engineering (~10M daily data points), Python microservices, and AI/MLOps operational intelligence. Proven track record in transforming complex telecom environments into reliable, automated platforms. Key contributor to the company's Agile NT MLOps & AI Squad (formed 2024), active contributor to Deutsche Telekom's Common Operating Model for Europe (COME), and instructor delivering organizational upskilling in Machine Learning & AI.

CORE EXPERTISE PILLARS

Telecom Domain Authority Deep expertise across Huawei IMS & Nokia SDVoice (Core, SBC, HSS, MGW), SIP/Diameter protocols, core applications, access, roaming, alarms, and operational troubleshooting.	Observability & Intelligence Root admin of enterprise Grafana platform (500+ dashboards, 420+ active users), plugins support, KPI modeling, and near real-time operational visibility.
Data Engineering & High Scale Python (Pandas, NumPy) ETL pipelines processing 30,000+ metrics per 5/15 min interval (~10M daily data points), TimescaleDB, MySQL, InfluxDB, RHEL/Rocky Linux admin.	MLOps & Time-Series AI Applied ML practitioner. Time-series anomaly detection (ADTK, Isolation Forest), MLOps pipelines within the enterprise Agile Squad, and AI training delivery.

PROFESSIONAL EXPERIENCE

ML & AI Instructor OTEAcademy - Co-designed the ML & AI Essentials Training Program as part of a 5-member team of SMEs, co-authoring comprehensive training materials focused on real-world telecom & enterprise use cases. - Maintained a 99%+ positive participant feedback rating, supporting organizational upskilling and expanding curriculum into advanced learning paths.	Dec 2024 – Present
Data Science & MLOps Engineer OTE Group (HTO) – NT MLOps & AI Squad (Agile) - Core member of the newly established Agile NT MLOps & AI Squad, scaling individual ML engineering initiatives into enterprise operational models. - Design and deploy end-to-end ML/MLOps solutions leveraging DataRobot & Python (Scikit-Learn, ADTK) covering Clustering, Classification, Predictive Modeling, Anomaly Detection, Root Cause Analysis (RCA), and Association Rule Learning across telecom operations. - Contribute to Deutsche Telekom's Common Operating Model for Europe (COME) by embedding DataRobot MLOps capabilities, automated data pipelines, and operational intelligence into DT footprint workflows. - Develop Python ETL pipelines (Pandas, NumPy) processing 30,000+ metrics per 5/15 min (~10M daily data points) for metric aggregation and KPI analytics.	Jul 2024 – Present
Senior Voice Support Engineer OTE Group (HTO) - Operational support for Huawei IMS and Nokia SDVoice voice-core environments (Core, SBC, HSS, MGW, Application Servers, Roaming, and Alarms) with 100% SLA compliance. - Built monitoring platforms & 500+ Grafana dashboards for 420+ users that significantly reduced MTTR and strengthened operational readiness. - Administered backend storage & Linux microservices including TimescaleDB, PostgreSQL, MySQL, InfluxDB, and 45+ Python microservices on RHEL.	Jun 2014 – Present

- Voice Support Engineer (OTE NOC, 2006–2014): **Delivered operations management, L2/L3 technical support, and hands-on field engineering for Ericsson AXE-10 switches (SSPs/STPs) and Intracom NBMS (V5.2). Provided specialized L2/L3 support for Huawei IMS core networks, while automating network management tasks via Unix Shell & Perl Scripting.**
- Telecommunication Systems Technician (Northstar SA, 2000–2001): **Managed Northern Greece telecom hub/node operations. Provided technical support, VPN solutions, and field installation/commissioning of telecom equipment for enterprise clients.**
- Vocational & Technical Roles (1996–2006): **Alcatel-Lucent system installation & pre-sales (Georgatou Athina), subscriber access network maintenance (HTO), and wireless transmission stations/PBX (Hellenic Army).**

KEY OPERATIONAL PROJECTS & PLATFORM OWNERSHIP

Enterprise MLOps & Multi-Task Machine Learning Pipelines [\[MLOps & AI\]](#)

Engineered and deployed end-to-end MLOps solutions integrating DataRobot AutoML and custom Python workflows (Scikit-Learn, ADTK). Developed production models covering Clustering, Classification, Time-Series Prediction, Anomaly Detection, Root Cause Analysis (RCA), and Association Rule Learning to drive proactive operational intelligence.

Tech Stack: DataRobot | Python | Scikit-Learn | ADTK | Pandas | RCA & Association Rules

Voice Network Metrics to KPI High-Scale Pipelines [\[Data Engineering\]](#)

Engineered high-throughput Python (Pandas, NumPy) ETL pipelines ingesting and processing 30,000+ metrics every 5–15 minutes (~10M daily data points) across Core Voice, SBC, Roaming, and Alarms into TimescaleDB.

Tech Stack: Python | Pandas | NumPy | TimescaledDB | MySQL | ~10M Daily Data Points

Grafana Enterprise & Network Observability Operations [\[Observability\]](#)

Root administration and engineering for enterprise Grafana platform, managing over 500+ operational dashboards for 420+ active users. Handled custom plugin integration, user RBAC, and internal incident resolution without vendor escalation.

Tech Stack: Grafana Enterprise | 500+ Dashboards | 420+ Users | Multi Type Data Sources | Security Patching

Platform Ownership: Databases, Microservices & Secure Operations [\[Platform Reliability\]](#)

Full operational ownership of multi-database infrastructure & 45+ native Python microservices on Rocky/RHEL Linux featuring PostgreSQL + TimescaleDB, MySQL, and InfluxDB. Managed schema optimization, security patching, and vulnerability remediation.

Tech Stack: PostgreSQL | TimescaleDB | MySQL | InfluxDB | MongoDB | 45+ Python Microservices | RHEL

Emergency Events & Network Impact Monitoring [\[Proactive Operations\]](#)

Designed near real-time monitoring workflows correlating civil protection alerts (civil protection alerts, severe weather, earthquakes, fires) with network elements to enable proactive risk mitigation and rapid emergency response.

Tech Stack: Python | Civil Protection | Geospatial / Maps | Network Readiness

PERFORMANCE HIGHLIGHTS & EDUCATION

Performance Feedback: *"Consistently exceeds expectations across Core Voice, MLOps/AI Squad, and DT COME initiatives. Recognized for decisive leadership in co-designing and delivering the enterprise ML & AI training program as part of the core SME team."*

Private Institute of Vocational Education 'Pythagoras'

Technical Supporter of Telecom Systems & Data Transmission (1998–1999)

Technical High School of Kalamaria

Certificate in Electronic Facilities & Automation (1994–1996)

Strategakis Schools & Univ. of Oxford Delegacy

First Certificate in Computing / Programming (1991–1993)