

SAYHA KILIÇ

Senior Middleware & DevOps Engineer | Banking & Financial Services

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SUMMARY

Senior Middleware & DevOps Engineer with 6+ years of experience operating mission-critical, 24x7 payment and analytics platforms in the banking sector. Currently responsible for **69 production systems** at Şekerbank, including Visa/Mastercard switching, EFT/FAST/KOLAS, SWIFT and fraud-detection workloads on OpenShift/Kubernetes. Proven track record in **CI/CD automation (Jenkins, GitLab CI, ArgoCD)**, high-availability architecture, enterprise backup & disaster recovery and regulatory compliance (BDDK, ISO 22301). Measurable impact: **deployment time reduced by 88%, unplanned outages reduced by 70%, 99.9% payment-platform uptime, zero audit findings.**

CORE SKILLS

Payment & Banking: Visa/Mastercard Switch, VCX (Visa Clearing Exchange), EFT/FAST/KOLAS Gateway, SWIFT Gateway, Fraud Detection, ISO 8583, ISO 20022, EMV, POS GMS, Forex/Reuters

Middleware & Platforms: SAS Viya, SAS MA, SAS IFRS, Apache Tomcat, Nginx, IIS, IBM WebSphere, JBoss, IBM API Connect, Red Hat Satellite, Riverbed

DevOps & CI/CD: Jenkins, GitLab CI/CD, ArgoCD (GitOps), Ansible, Terraform, Helm, Control-M, SonarQube, Blue-Green Deployment

Containers & Orchestration: Kubernetes, Red Hat OpenShift, Docker, Docker Compose, HPA Auto-scaling, Velero

Monitoring & Observability: Zabbix, Prometheus, Grafana, Thanos, Alertmanager, ELK Stack (Elasticsearch, Logstash, Kibana, Filebeat), SolarWinds, Uptime Kuma

Backup & DR: Cohesity, Commvault, Veritas NetBackup, Veeam, Velero, NetApp FAS/AFF, Dell EMC DataDomain, Huawei OceanStor, Oracle SL150, SAN/NAS, Oracle RMAN

Cloud & Security: AWS, Azure, VMware, Hyper-V, F5 BIG-IP (LTM/ASM/iRules), Fortinet FortiGate, Palo Alto, WireGuard VPN, Splunk SIEM, CrowdSec, SELinux, firewallD, SSL/TLS

Databases: PostgreSQL (Streaming Replication, Patroni, pgBouncer), Oracle, MS SQL Server, MongoDB, Redis

Programming: Python, Go, Bash, PowerShell, SQL, YAML

Governance & Compliance: BDDK regulatory audits, ISO 22301 (BCMS), Business Impact Analysis (BIA), DR testing, IFRS 9 reporting

PROFESSIONAL EXPERIENCE

Senior Specialist - Middleware System Engineer

Şekerbank T.A.Ş. · İstanbul | Jan 2025 – Present

- Own middleware operations for **69 business-critical banking systems** with 24x7 availability requirements across payment, treasury and analytics domains.
- Operate the **Visa/Mastercard switching platform** (ISO 8583): transaction routing, millisecond-level response times and active/active high-availability configuration.
- Lead the **VCX (Visa Clearing Exchange) migration**: Windows Server 2022 build-out, PostgreSQL integration, SSL/TLS certificate lifecycle and EAS/DEX file-transfer interfaces (regulatory deadline Aug 2026).
- Manage the **EFT/FAST/KOLAS gateway** integrated with the Central Bank (TCMB), processing millions of TL daily with full regulatory reporting.
- Run **real-time fraud-detection** services (ML-based anomaly detection, false-positive tuning) and the **SWIFT gateway** for international transfers.
- Deploy and operate **SAS Viya / SAS MA / SAS IFRS** as Helm-managed microservices on OpenShift, supporting ML model management and IFRS 9 reporting.
- Designed and optimized **Jenkins-based CI/CD pipelines** with Ansible automation and Red Hat Satellite patch management, **cutting deployment time from 4 h to 30 min (-88%)**.
- Built proactive observability across **500+ servers** with Zabbix, Grafana and ELK, **reducing unplanned outages by 70%**.
- Resolved a production **Visa/Mastercard latency spike (50 ms → 500 ms) within 15 minutes** via log analytics and root-cause troubleshooting; sustained **99.9% uptime** on payment systems.

Specialist - Backup, Storage & Business Continuity

Şekerbank T.A.Ş. · İstanbul | Jan 2024 – Jan 2025

- Managed enterprise backup/restore for **Oracle and MS SQL** databases and **VMware/Hyper-V** virtual infrastructure; administered SAN/storage and designed **DR replication** strategies.
- Implemented an **ISO 22301-compliant Business Continuity Management System**, including Business Impact Analysis and crisis-management procedures.
- Introduced **Kubernetes-native backup with Velero**, etcd snapshots and GitOps-based Infrastructure as Code.
- Cut restore times by 40%** with an incremental backup strategy; **100% success** in monthly DR tests; **zero findings** in BDDK business-continuity audits.

System & Network Security Engineer

BNTPRO Bilgi ve İletişim Hizmetleri A.Ş. · İstanbul | Jan 2023 – Jan 2024

- Deployed and managed **F5 BIG-IP high-availability architecture**; load balancing and WAF via LTM/ASM with advanced iRules traffic control.
- Implemented **rate-limiting-based DDoS protection**, SSL certificate management and **Splunk SIEM** log analytics for anomaly detection.
- Automatically blocked 95% of DDoS attacks**; raised system uptime from **99.5% to 99.9%**.

System & Data Backup Engineer

DATACORE Bilgi Sistemleri · Istanbul | Jan 2022 – Jan 2023

- Designed enterprise backup policies with **Commvault** following the **3-2-1 principle**; administered NetApp FAS/AFF, Huawei OceanStor and Dell EMC DataDomain; application-aware backups for MS SQL and Oracle RMAN; Azure/AWS cloud backup strategies.
- Delivered backup solutions to **50+ enterprise customers**; **reduced storage costs by 30%** through deduplication.

Ecosystem Technology Engineer (Intern)

Xiaomi Technology · Istanbul | Jan 2021 – Jan 2022

- Device testing for the Turkish market; defect reporting with global R&D; teams across 50+ device models.

Automation & SCADA Internships

Volkswagen (Ukraine) · İSKİ (Istanbul) | 2018 – 2020

- PLC automation monitoring; SCADA (Wonderware InTouch, WinCC); Siemens S7 / TIA Portal, Profibus/Modbus RTU.

PROJECTS (SELF-HOSTED PRODUCTION LAB — SAYHA.CLOUD)

- Enterprise Backup Platform** — Go, PostgreSQL, Kubernetes, gRPC, MinIO, Restic. 17-microservice platform for filesystem, MSSQL, MongoDB, Docker volume and Kubernetes workloads; ML anomaly detection, GFS retention, multi-tenant RBAC.
- CI/CD Pipeline** — GitLab CI, ArgoCD, SonarQube. Fully automated build-test-deploy with blue-green deployment; 88% faster commit-to-production, zero-downtime releases.
- Kubernetes Cluster** — OpenShift/Kubernetes with self-healing pods, HPA auto-scaling and rolling deployments.
- Fraud Detection System** — Apache Kafka, Python, Prometheus, Grafana. Real-time event-streaming fraud detection with ML anomaly scoring and automated PDF reporting.
- Unified Observability ("Komuta Merkezi")** — Prometheus, Grafana, Thanos, Alertmanager. Single-pane monitoring of 16 systems with a unified alert stream.
- API Gateway & DB Replication** — Kong/Nginx/OAuth2/Redis gateway with rate limiting, circuit breaker and JWT auth; PostgreSQL streaming replication with Patroni failover and pgBouncer.
- SAYHA Borsa** — PHP, JavaScript, REST API, Docker. Real-time FX, gold and BIST 100 tracking (TCMB, CollectAPI).
- Security & Infrastructure** — CrowdSec IPS/IDS, Pi-hole DNS (416K+ domains, DNSSEC), WireGuard VPN, Uptime Kuma; 40+ containers on UGREEN NAS with 3-2-1 backups.

OPEN SOURCE (GITHUB.COM/SAYHAKILIC61)

- iso8583-switch** (Python) — Payment-switch simulator on the real ISO 8583 protocol: MTI, bitmap, LLVAR/LLVAR encoding, acquirer→switch→issuer authorization flow, DE39 response codes.
- fraud-detection** (Python) — Real-time card-transaction fraud scoring with Redis Streams; velocity, impossible-travel, amount-anomaly and risky-MCC rules.
- scam-shield** (Python) — Authorized-push-payment (APP) scam decision engine; explainable three-band APPROVE / HOLD / REJECT. FastAPI + Redis.
- mule-graph** (Python) — Money-mule network detection via graph analytics (fan-in/fan-out, circular transfers) and federated inter-bank signals. NetworkX + FastAPI.
- sayha-backup-engine** (Go) — restic-based, encrypted 3-2-1 backup engine for PostgreSQL, MySQL, MSSQL, MongoDB, Redis, Couchbase and Kubernetes/OpenShift.
- soc-triage** (Python) — Real-time SOC alert triage: asset criticality, IOC threat intel, MITRE ATT&CK severity and correlation for P1-P4 prioritization.

CERTIFICATES

- SAS — Foundations Knowledge Badge (Aug 2026)
- IBM — Introduction to Containers, Kubernetes & OpenShift (Jan 2026)
- Red Hat — OpenShift Technical Overview, DO080 (Dec 2025)
- Linux Foundation — LFS101: Introduction to Linux (Aug 2025)
- AWS — Solutions Architect Associate SAA-C03, Official Practice Exam (Jun 2025)
- AWS — Cloud Practitioner CLF-C02, Official Practice Exam (May 2025)
- AWS — Technical Essentials (Apr 2025)
- AWS — Getting Started with AWS Storage (Apr 2025)
- Google — Introduction to Responsible AI (Apr 2025)
- Cohesity — Data Protection for Microsoft 365 (May 2025)
- Cohesity — Platform Foundations (Apr 2025)
- Cohesity — Data Classification (Apr 2025)
- Fortinet — Certified Associate in Cybersecurity, FCA (Jan 2025)
- Fortinet — FortiGate 7.4 Operator (Jan 2025)
- Cisco — CCNA: Introduction to Networks (Apr 2024)
- Commvault — Technical Sales Professional (Mar 2024)
- BTK Akademi — Systems Engineering (Mar 2024)
- Vidobu — Occupational Health & Safety Program (Mar 2024)
- Commvault — Certified Professional (Jun 2023)
- Cisco — Introduction to Networks, CCNAv7 (Oct 2022)

EDUCATION

- Anadolu University** — Management Information Systems (2024 – Present)
- Istanbul University** — Economics (2021 – 2024)
- Istanbul Technical University** — Control & Automation Engineering (2021 – 2023)
- Kharkiv Polytechnic Institute, Ukraine** — Mechatronics Engineering (2020 – 2021)
- Kocaeli University** — Mechatronics Engineering (2018 – 2020)

LANGUAGES

Turkish (Native) · English (Professional) · Russian (Basic)