Mohamed Gamal Sedeek

Software & Data Engineer

+201028822031

Badrashin, Giza, Egypt

Mohamed.gamal.sedeek@hotmail.com
linkedin.com/in/mohamgamal
kaggle | Portiflio | github
Reference link

Professional Summary

Results-oriented Software and Data Engineer with over 10 years of proven success in .NET development, data engineering, and cloud-based enterprise systems. Expert in software architecture, API design, and ETL pipelines using C#, SQL Server, SSIS, Kafka, and .NET Core. Adept at delivering scalable, high-performance solutions integrating legacy and modern systems across enterprise, judicial, and governmental sectors. Demonstrates strong proficiency in database design, data warehousing, and real-time streaming architectures using Kafka, Debezium, and PostgreSQL. Skilled in containerization and DevOps practices (Docker, Kubernetes, Helm) with a deep understanding of CI/CD, monitoring, and microservices orchestration. Recognized for technical leadership, Agile collaboration, and ability to drive continuous improvement in complex software ecosystems. Committed to innovation, maintainability, and datadriven performance optimization to achieve measurable business outcomes.

Education

Bachelor of Commerce | 2005Faculty of Commerce — Cairo University, Egypt

Work Experience

3i-Vision — Senior .NET Developer | Feb 2025 - Present

- Working on integration between WPF desktop applications and web-based systems.
- Developing and maintaining backend solutions using .NET Core and .NET Framework 4.8.
- Designing and implementing Web APIs for secure and efficient data exchange.
- Collaborating on system architecture and web-service integration with existing platforms.
- Optimizing SOL Server performance and managing stored procedures for high-volume data.
- Supporting deployment, debugging, and enhancement of client-facing modules.

JIC — Senior .NET Developer & Data Engineer | 2013 – 2025

Key Responsibilities (2020 – 2025)

- Designed end-to-end enterprise systems from requirements to deployment.
- Built data pipelines and ETL workflows integrating court systems into centralized databases.
- Developed APIs and microservices for the Ministry of Justice portal.
- Implemented real-time case-tracking and reporting functionality.
- Optimized SQL Server schemas, indexing, and queries for scalability.
- Led Agile sprints, mentored junior engineers, and ensured continuous delivery.

Earlier Role (2015 - 2020)

- Gathered requirements and delivered maintainable .NET applications.
- Designed relational database structures and enhanced data performance.
- Conducted code reviews, debugging, and unit testing.
- Provided post-implementation support and documentation.

Selected Projects

Integration Service (Courts ↔ G2G) — Technical Team Lead

- Analyzing business requirements and designing service-oriented architecture (SOA) with WCF and SQL Server 2012.
- Unifying data formats and ensuring real-time synchronization between heterogeneous systems.
- Implementing secure communication, encryption, and optimized queries for rapid data retrieval.

Complaints Management System (MOJ) — Technical Team Lead

- Building a centralized web application using ASP.NET Core and TFS 2017 for complaint handling.
- Enhancing efficiency by automating workflows, notifications, and escalations—reducing manual processing by 45%.
- Configuring role-based access, dashboard visuals, and real-time analytics for transparency and accountability.

Data Warehouse & ETL System — Team Leader

- Designing SSIS-based ETL pipelines aggregating data from multiple sources into a SQL Server data warehouse.
- Validating and transforming data to ensure reporting accuracy and performance.
- Enabling Power BI and OBIEE dashboards supporting executive analytics and reducing manual reporting by 50%.

SPARROW-INN Cloud Hotel Management System — Developer

- Developing a multi-tenant SaaS solution using ASP.NET MVC and SQL Server 2016, ensuring secure tenant isolation.
- Implementing dynamic pricing, reservation, and billing modules with integrated reporting features.
- Deploying in cloud environments with automated scaling and load balancing for 24/7 availability.

Judicial Portal & Statistics System — Technical Team Lead

- Creating ASP.NET dashboards consolidating judicial statistics nationwide.
- Automating data collection and reporting, reducing manual effort by over 50%.
- Ensuring high availability through redundancy designs and failover support.

Technical Practices & DevOps Projects

- Designing high-availability Kubernetes clusters with Helm, Nginx Ingress, Prometheus, and Grafana monitoring.
- Building real-time CDC pipelines (PostgreSQL → MongoDB) using Debezium + Kafka, processing 10 K records/min with Python consumers.
- Creating distributed ETL solutions (.NET Core + Dapper) improving search speed by 300%.
- Developing event-driven microservices handling 5 K messages/sec via Kafka and . NET 6, containerizing with Docker.
- Configuring NGINX Ingress with Canary Deployments, TLS termination, and Cert-Manager automation.

Personal Skills

- · Strong analytical mindset.
- Excellent problem-solving ability.
- · Effective communication skills.
- · Leadership and team mentoring.

- · High attention to detail.
- Time and task management.
- Strategic decision-making ability.
- · Adaptability under pressure.

Career Skills

- .NET Development & Architecture: Designing and maintaining enterprise-grade applications using .NET Core and MVC frameworks.
- **API & Microservices Design:** Building and integrating RESTful APIs enabling interoperability across distributed systems.
- Data Engineering & ETL: Developing and automating ETL pipelines using SSIS, SQL Server, and Kafka.
- **Database Optimization:** Structuring and tuning SQL Server, PostgreSQL, and MongoDB databases for high availability.
- **Cloud & DevOps Integration:** Implementing Docker, Kubernetes, and Helm for CI/CD automation and container orchestration.
- System Analysis & Architecture: Translating business needs into scalable technical solutions.
- **Agile Leadership:** Guiding teams, leading sprints, and enforcing best practices for continuous delivery.

Software Skills

- **Programming & Frameworks:** C#, ASP.NET Core, .NET Framework, Entity Framework, LINQ, JavaScript, Python.
- Database & Data Engineering: SQL Server, PostgreSQL, MongoDB, SSIS, SSRS, SSAS, Dapper, Kafka, Debezium, ETL Pipelines, Data Warehousing.
- **DevOps & Cloud Technologies:** Docker, Kubernetes, Helm, Nginx Ingress, Prometheus, Grafana, GitHub Actions, CI/CD, VMware.
- **Reporting & Analytics Tools:** Power BI, OBIEE, Excel BI, SSRS Dashboards.
- Version Control & Project Management: Git, GitHub, TFS, Azure DevOps, Agile & Scrum Practices.
- Libraries & Data Science: Pandas, NumPy, Matplotlib, Scikit-learn, Seaborn.

Languages

- Arabic: Native speaker.
- **English:** Very Good (Reading, Writing, and Speaking).