

Hosam Ibrahim

+20 100 545 6677 • hosam.fazie@hotmail.com • [linkedin.com/in/hosam-ibrahim](https://www.linkedin.com/in/hosam-ibrahim) •
<https://hosam-f-ibrahim.github.io/>

Business & Systems Analyst | Senior Solutions Architect | Lead Software Engineer

Highly accomplished and results-oriented Business and Systems Analyst, Senior Solutions Architect, and Lead Software Engineer with over 18 years of experience designing and delivering innovative software solutions across diverse industries and international markets. Expert at leveraging cutting-edge technologies and strategic methodologies to drive business value, optimize operations, and enhance user experience. Proven track record of leading cross-functional teams, architecting scalable systems, and translating complex requirements into robust, high-performance applications to deliver significant business value.

WORK EXPERIENCE

intelliSYS Solutions & Consulting

10/2019 – Present

Head of Professional Services / Senior Solutions Architect • Full-time

Cairo, Egypt

- Requirements analysis and specifications.
- Solutions architecting, system design, plan preparation & technical project management.
- Data transformation solutions for migrating older systems into new ones.
- Extending software solutions capabilities through plugins and add-ons to help bridging the business gaps.
- Projects & Country Experience: Egypt, Malta, Ghana, Nigeria, Iraq.
- **Skills:** Python (Programming Language) · Team Management · Performance Improvement · Software Project Management · Data Transformation Services (DTS) · Artificial Intelligence (AI) · Requirement Specifications · Software Design · Software Development · Data Migration · Coaching & Mentoring · Team Building · Databases · Leading Development Teams · Data Scraping · Requirements Analysis · Prompt Engineering · Plugins · Requirements Gathering · Integration · Data Transformation · Solution Architecture

Software Engineering Team Lead • Full-time

Cairo, Egypt

- Requirements analysis.
- System design.
- Data transformation solutions.
- Data migration solutions.
- Data integration solutions.
- **Skills:** C# · Technology Leadership · JavaScript · XQuery · Microsoft Azure · Artificial Intelligence (AI) · Transact-SQL (T-SQL) · HTML · Software Design · Software Development · Critical Thinking · Analytical Skills · Microsoft SQL Server · Databases · Leading Development Teams · .Net · Azure DevOps Services · XPath · Vue.js · Logical Approach · Time Management

Senior Software Engineer

Cairo, Egypt

- Requirements analysis.
- System design.
- Data transformation solutions.
- Data migration solutions.
- Data integration solutions.
- **Skills:** Software Engineering · Large Scale Development · C# · XQuery · Artificial Intelligence (AI) · Transact-SQL (T-SQL) · Problem Solving · Software Design · Software Development · Critical Thinking · Analytical Skills · Microsoft SQL Server · Databases · .Net · XPath · Vue.js · Testing · Logical Approach

Rakaaiz

09/2014 – 09/2019

Business/System Analyst & Lead Software Developer

- Architect, design and develop software solutions for multiple business domains such as: Event Management, Financial Sector, Charity Management, Social Networking, Real Estate, Geolocation, Meeting Management, Correspondence Management ...etc.
- Projects & Country Experience: Egypt, UAE, CA.

Freelancer

01/2014 – 08/2014

Software Engineer

Egypt

- Performing all necessary & required actions for providing a complete integrated software solutions that adds a great value to both the customer & the business including: Business analysis, systems analysis, user requirements analysis, high level solution design, low level algorithms design, team leading, team training, project planning...

ASEC Automation (ASA)

11/2009 – 12/2013

Software Engineer

- Responsible for all software development aspects

Freelancer

01/2009 – 11/2009

Development Team Leader

- Business analysis, systems analysis, user requirements analysis, high level solution design, low level algorithms design, team leading, team training, project planning & scheduling...

Design & Project Management Engineering CO. (DPME)

01/2006 – 12/2008

Development Vice Manager & Tech Lead

- Business analysis, systems analysis, user requirements analysis, high level solution design, low level algorithms design, team leading, team training, project planning & scheduling...

EDUCATION

Bachelor of Science (BSc) in Accounting

Faculty of Commerce, Cairo University

01/1997 – 01/2002

CERTIFICATIONS

Microsoft Certified Professional Developer (MCPD): Enterprise Applications.

Microsoft

Microsoft Certified Technology Specialist (MCTS): .NET Framework 2.0 Distributed Applications.

Microsoft

Microsoft Certified Technology Specialist (MCTS): SQL Server 2005.

Microsoft

PROJECTS

FIU360

03/2020 – Present

intelliSYS Solutions & Consulting

I led the architecture, design, and delivery of FIU360, a scalable financial intelligence platform meeting AML/CFT standards (FATF, UN), featuring a modular design for seamless integration, configurability, and security.

Key capabilities include:

Registration: establishing a nationwide verified counterpart registry with role-based access, speeding onboarding.

Data Collection: uses a flexible XML engine (300+ parameters) for CTR, STR, EFT, AIF, standardizing reports for seamless ingestion. Sanctions Screening employs an intake workflow against watchlists with alerts, case confirmation, whitelisting, and auto-escalation.

Data Enrichment (FIU360 Connect) assimilates intelligence from diverse financial, national/international, and open sources, boosting investigative leads.

Data Management: uses AI-driven search and advanced indexing for record analysis, accelerating relationship discovery.

AI-Powered Analytics: leverage LLMs for dual-path analytics, transforming data into real-time operational intelligence and strategic insights.

Data Visualization: provides an interactive suite with graphing tools and intuitive dashboards for enhanced pattern detection.

Case Management: offers a layered framework with access controls and a specialized AML/CFT module, improving closure rates.

Document Management: integrates file attachment to records with full-text search.

The Statistics module: delivers one-click FATF-compliant reports.

Dissemination automates analysis distribution, freeing analysts.

BI Dashboards provide drag-and-drop customizable reporting for real-time insights.

FIU360's security foundation includes end-to-end encryption, RBAC, detailed auditing, tamper-proof logs, and zero-trust principles.

I championed Agile delivery, CI/CD in Azure DevOps, and mentored cross-functional teams in full-stack architecture, data engineering, AI integration, and regulatory strategy, ensuring FIU360's success in empowering Financial Intelligence Units globally.

Skills: Workflow Automation · Extract, Transform, Load (ETL) · Azure DevOps Services · .Net · Web Development · Requirements Analysis · JavaScript · Problem Solving · Parallel Programming · Team Leadership · Large Scale Development · Agile Methodologies · Workflow Management · SQL · Design Patterns · XML Data Processing · UI/UX Design · REST APIs · Web Services · Solution Architecture · Microsoft SQL Server · Stakeholder Management · DevExpress · Leading Development Teams · System Integration · Vue.js · Team Building · Critical Thinking · Graphing Tools · HTML · XML Schema · C# · Encryption · Requirement Specifications · Software Development · Transact-SQL (T-SQL) · Data Modeling · Scalability · Software Project Management · Artificial Intelligence (AI) · Business Intelligence (BI) · Team Management · Logical Approach · Data Transformation · Software Architecture · Data Integration · Database Design · Performance Tuning

AML PRO

01/2022 – 12/2022

intelliSYS Solutions & Consulting

Implemented a .NET/C# application to streamline FIU XML reporting, enabling reporting entities to submit compliant data from day one and reducing onboarding time.

Built an External Data Manager to import and normalize client data from Excel and organizational databases, minimizing the manual data ingestion effort.

Implemented a Client Data Manager with intelligent validation rules and error-handling routines that flagged and corrected data inconsistencies before submission.

Leveraged advanced data-transformation mappings for cleansing, deduplication, and normalization, standardizing client records across diverse source formats.

Integrated DevExpress controls to build an intuitive UI for compliance officers, accelerating issue resolution through easy editing and annotation.

Collaborated with compliance, legal, and business stakeholders to capture requirements and ensure alignment with FIU mandates.

Mentored junior engineers on best practices in ETL design, data validation, and .NET development, raising team productivity.

Managed source code with Git, enforcing pull-request reviews and branching strategies to maintain code quality.

Skills: Extract, Transform, Load (ETL) · .Net · Data Validation · Software Engineering · SQL · XML Data Processing · Web Services · Microsoft SQL Server · Stakeholder Management · DevExpress · System Integration · XML Schema · C# · Software Development · Data Quality · Data Transformation

Data Visualization

01/2020 - 07/2021

intelliSYS Solutions & Consulting

Architected a scalable .NET/C# visualization framework to render all database objects and relationships, reducing analyst effort by 90%.

Designed interactive dashboards with drill-down and filter capabilities, enabling compliance teams to identify suspicious patterns faster.

Integrated external databases through dynamic data connectors, supporting cross-database relationship mapping for a unified view.

Implemented RESTful Web Services to fetch real-time data from multiple sources, ensuring up-to-date visual insights.

Optimized Microsoft SQL Server views and stored procedures to pre-aggregate relationship data, cutting load times by 50%.

Developed parallel data-processing pipelines for large-scale ETL tasks.

Built graphing components and layouts to visualize complex entity networks, enhancing detection of anomalous clusters.

Applied advanced data-transformation rules to normalize schema variations, improving consistency across visualized datasets.

Defined software architecture and component interfaces, ensuring modularity and ease of future enhancements.

Conducted requirements analysis workshops with stakeholders to capture visualization needs and refine UX flows.

Established CI/CD pipelines in Azure DevOps for automated deployment of visualization updates with zero downtime.

Monitored performance with Application Insights, proactively identifying and resolving bottlenecks in graph rendering.

Mentored junior developers on best practices for real-time data binding and memory management in rich UI.

Adopted Agile processes, delivering incremental visualization features.

Managed source control with Git, enforcing branching strategies and peer code reviews.

Skills: Extract, Transform, Load (ETL) · Graphing · .Net · Requirements Analysis · Cross-Database Integration · Software Design · Parallel Programming · Agile Methodologies · SQL · UI/UX Design · REST APIs · Web Services · Microsoft SQL Server · Stakeholder Management · DevExpress · System Integration · Graphing Tools · C# · Data Visualization · Data Modeling · Data Transformation · Software Architecture · Performance Tuning

Data Enrichment

10/2019 – 01/2020

intelliSYS Solutions & Consulting

Architected an extensible .NET/C# add-on suite to automate enrichment of AML reports with data from financial, government, and open-source sources, removing the burden of manual data gathering, while increasing the security and accuracy of the data.

Implemented ETL pipelines to ingest, cleanse, and normalize heterogeneous datasets, achieving 99% data accuracy.

Implemented parallel programming patterns and multithreaded ETL workflows to process over 100K records/hour.

Orchestrated automated data-acquisition workflows that trigger on FIU report receipt or ad-hoc analyst requests, cutting latency by 99%.

Ensured data integrity with comprehensive validation, error-handling routines, and retry logic, lowering enrichment failures by more than 90%.

Collaborated with compliance and business stakeholders to align enrichment outputs with AML regulatory requirements.

Designed advanced data-transformation mappings (cleansing, deduplication, normalization) to standardize disparate source formats.

Monitored application health and performance with logging and telemetry (Application Insights), proactively resolving bottlenecks.

Secured sensitive data in transit with TLS encryption.

Coordinated with third-party API providers to expand data coverage and ensure SLA compliance.

Skills: Extract, Transform, Load (ETL) · .Net · Requirements Analysis · Software Design · Parallel Programming · SQL · REST APIs · Web Services · Microsoft SQL Server · Stakeholder Management · System Integration · C# · Data Modeling · Data Transformation · Data Integration · Performance Tuning

Appointment Reservation System

01/2014 – 09/2019

Developed a user-friendly appointment reservation system using C# and the .NET Framework, enabling clinics, labs, and other businesses to efficiently manage client appointments.

Designed an intuitive interface that allows clients to easily book, reschedule, and cancel appointments online, improving client satisfaction and reducing administrative burden.

Implemented a robust database using Microsoft SQL Server to securely store appointment details, client information, and service availability.

Integrated the system with existing business processes to streamline scheduling and resource allocation.

Ensured the scalability and reliability of the application to handle a growing number of users and appointment requests.

Skills: .Net · Requirements Analysis · Problem Solving · Software Engineering · REST APIs · Web Services · Microsoft SQL Server · Stakeholder Management · C# · Entity Framework · Software Project Management · Database Design

Financial Management System

01/2014 – 09/2019

Rakaaiz

Led the development of a Financial Management System using .NET technologies, providing comprehensive tools for financial planning, analysis, and reporting.

Designed and implemented key modules for budgeting, forecasting, and general ledger management, improving the accuracy and efficiency of financial operations.

Developed robust data validation and security measures to ensure the integrity and confidentiality of financial data.

Integrated the system with existing web services to facilitate seamless data exchange with other enterprise applications.

Utilized HTML, JavaScript, and AngularJS to create a responsive and interactive user interface for financial professionals.

Optimized database queries and application performance to ensure timely access to critical financial information.

Skills: .Net · Web Development · Requirements Analysis · AngularJS · JavaScript · Software Design · Team Leadership · Cascading Style Sheets (CSS) · REST APIs · Web Services · Microsoft SQL Server · HTML · Entity Framework · Data Analysis · Software Development · Database Design · Performance Tuning

HR Management System

01/2014 – 09/2019

Rakaaiz

Engineered an HR Management System using .NET, SQL Server, and web technologies to streamline human resources processes, including employee records, payroll, and benefits administration.

Designed a comprehensive database schema in SQL Server to efficiently manage employee data and ensure data integrity.

Developed user-friendly interfaces using JavaScript, AngularJS, and Cascading Style Sheets (CSS) for various HR functions.

Implemented secure authentication and authorization mechanisms to protect sensitive employee information.

Integrated reporting capabilities to provide HR professionals with valuable insights into workforce trends and metrics.

Skills: .Net · Web Development · Requirements Analysis · AngularJS · JavaScript · Software Design · Software Engineering · Cascading Style Sheets (CSS) · REST APIs · Web Services · Microsoft SQL Server · HTML · Transact-SQL (T-SQL) · Database Design

NPO Operation Management System

01/2014 – 09/2019

Rakaaiz

Developed an NPO Operation Management System utilizing .NET, SQL Server, and web technologies to optimize the operational efficiency of non-profit organizations.

Designed a modular system to manage various aspects of NPO operations, including donor management, and program tracking.

Implemented robust security measures, including encryption, to protect sensitive donor and operational

data.

Developed interactive user interfaces using JavaScript, jQuery, Bootstrap, and Web Development best practices.

Integrated reporting and analytics capabilities to provide insights into program effectiveness and resource allocation.

Skills: Web Development · Requirements Analysis · JavaScript · Software Design · Software Engineering · Cascading Style Sheets (CSS) · REST APIs · Microsoft SQL Server · Bootstrap (Framework) · HTML · Encryption · Transact-SQL (T-SQL) · jQuery · Database Design

Social Networking Platform

01/2014 – 09/2019

Rakaaiz

Contributed to the development of a Social Networking Platform using .NET, SQL Server, and web technologies, focusing on features to enhance user engagement and community building.

Designed and implemented key features such as user profiles, content sharing, and social interaction tools.

Developed a scalable database architecture in SQL Server to accommodate a growing user base and increasing data volume.

Utilized JavaScript, jQuery, Bootstrap, HTML, and Cascading Style Sheets (CSS) to create a dynamic and user-friendly front-end experience.

Implemented security measures to protect user data and ensure platform integrity.

Skills: .Net · Web Development · Requirements Analysis · JavaScript · Software Design · Software Engineering · Cascading Style Sheets (CSS) · REST APIs · Microsoft SQL Server · Bootstrap (Framework) · HTML · Transact-SQL (T-SQL) · Scalability · jQuery · Database Design

Event Management System

01/2014 – 09/2019

Rakaaiz

Led the full lifecycle development of an Event Management System using .NET and SQL Server, streamlining event planning, registration, and execution processes.

Designed a robust database schema in SQL Server to efficiently manage event details, attendee information, and scheduling.

Developed a user-friendly web interface with JavaScript, jQuery, Bootstrap, HTML, and Cascading Style Sheets (CSS) for event organizers and attendees.

Implemented features for online registration, payment processing, and communication with attendees, enhancing user experience and event participation.

Integrated reporting and analytics capabilities to provide insights into event attendance, feedback, and overall success.

Utilized the Entity Framework for efficient data access and manipulation within the .NET environment.

Skills: .Net · Web Development · Requirements Analysis · JavaScript · Software Design · Software Engineering · Cascading Style Sheets (CSS) · REST APIs · Microsoft SQL Server · Bootstrap (Framework) · HTML · Entity Framework · jQuery · Database Design

Training Management System

01/2014 – 09/2019

Rakaaiz

Engineered a Training and Certification Management System using .NET and SQL Server, enabling each organization to design its own certificates from scratch with attached digital signatures, greatly enhancing the flexibility.

Architected the system to manage training programs, participant records, certification processes, and the generation of digitally signed certificates.

Developed a user-friendly interface with JavaScript, jQuery, Bootstrap, HTML, and Cascading Style Sheets (CSS) for designing and managing certificates.

Implemented digital signature functionality to ensure the authenticity and integrity of issued certificates.

Designed a flexible database structure in SQL Server to accommodate various training programs and certification requirements.

Utilized the Entity Framework for efficient data management and interaction within the .NET application.

Skills: Web Development · Requirements Analysis · JavaScript · Software Design · Software Engineering · Cascading Style Sheets (CSS) · REST APIs · Microsoft SQL Server · Bootstrap (Framework) · HTML · Entity Framework · jQuery · Database Design

Financial Planning System

01/2010 – 01/2014

ASEC Automation (ASA)

Developed a Financial Planning System to enable organizations to create and manage financial forecasts and budgets effectively.

Designed a flexible and user-friendly interface using Microsoft Access VBA and Excel to facilitate data input and scenario planning.

Implemented robust calculation engine to generate accurate financial projections and variance analyses.

Integrated data from various sources to provide a holistic view of the organization's financial landscape.

Generated customizable reports using Crystal Reports and Excel, enhancing financial transparency and decision-making.

Skills: Access VBA · Requirements Analysis · Software Design · Problem Solving · Stakeholder Management · Financial Planning · Data Analysis · Software Development · VBA Excel · Microsoft Access

OPC Client Software

01/2010 – 01/2014

ASEC Automation (ASA)

Developed OPC Client Software using .NET to facilitate seamless communication with process automation servers, enabling real-time data acquisition and control.

Designed a robust and reliable architecture to handle continuous data streams from OPC-compliant devices.

Implemented data visualization tools to provide operators with real-time insights into industrial processes.

Ensured secure and efficient data exchange between the client application and automation servers.

Skills: Real-Time Data Processing · .Net · Requirements Analysis · Software Design · Problem Solving · Industrial Automation · System Integration · Software Development · OPC (OLE for Process Control) · Microsoft Access · Database Design · Performance Tuning

Time Attendance Tracking System

01/2010 – 01/2014

ASEC Automation (ASA)

Developed a Time Attendance Tracking System using ASP.NET and SQL Server to automate employee timekeeping and attendance management.

Designed a user-friendly web interface for employees to clock in and out, request time off, and view their attendance records.

Implemented a robust database in SQL Server to store attendance data and generate comprehensive reports for payroll processing.

Integrated the system with existing HR and payroll systems to streamline administrative processes.

Skills: .Net · Web Development · Requirements Analysis · REST APIs · Microsoft SQL Server · System Integration · Software Development · ASP.NET

Travel Agency management system

01/2009 – 01/2010

Freelancer

Engineered a Travel Agency Management System using .NET, SQL Server, and web technologies to streamline booking processes, manage customer information, and track travel packages.

Designed a comprehensive database to store details of destinations, accommodations, flights, and customer bookings.

Developed user-friendly interfaces for travel agents to manage bookings, generate invoices, and communicate with clients.

Skills: .Net · Web Development · Requirements Analysis · Software Design · Problem Solving · Software Engineering · Stakeholder Management · Software Project Management · AJAX · ASP.NET · Database Design

DPME ERP

01/2006 – 12/2008

Design & Project Management Engineering CO. (DPME)

Led a full lifecycle development team in the design, implementation, and migration of a comprehensive ERP system encompassing Project Management, Financial, HR, Payroll, and Timesheet Management modules, streamlining core business operations.

Architected and developed a robust and scalable solution using C#, ASP.NET, and SQL Server, ensuring seamless data integration and workflow automation across departments.

Implemented key workflow management solutions that automated critical business processes, resulting in enhanced collaboration and a measurable reduction in administrative overhead by more than 50%.

Conducted thorough requirements analysis and translated business needs into detailed technical specifications, ensuring alignment between IT solutions and organizational goals.

Designed a secure and efficient database schema in SQL Server, optimizing data retrieval and reporting capabilities for improved business intelligence.

Managed the successful migration of legacy data into the new ERP system, ensuring data integrity and minimizing disruption to ongoing operations.

Provided leadership and guidance to the development team, fostering a collaborative environment focused on delivering high-quality, on-time solutions.

Skills: .Net · Requirements Analysis · Software Design · Data Migration · Team Leadership · Workflow Management · SQL · Microsoft SQL Server · ERP Implementations · C# · Software Project Management · AJAX · Visual Basic · ASP.NET · Data Integration · Database Design