

AHMED NEMREEN

AI Solution Architect | Enterprise AI Integration | Secure Digital Platforms

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EXECUTIVE PROFILE

AI Solution Architect with 16+ years across enterprise platforms, with hands-on AI product architecture through Hisn. Defined a four-stage Arabic inspection pipeline (Language → PII → Intent → Risk), tenant isolation, field-level RBAC and API-first services.

Currently Technical Lead and Solution Architecture Consultant on MIM platforms including Marsad and Tarmeez (PSNR). Earlier contributed to delivery of Labeeb (known internally as Ameen at GOSI), an Arabic AI-enabled omnichannel engagement platform, alongside independent work on Hisn and Loopwell.

CORE AI SOLUTION & PLATFORM ARCHITECTURE COMPETENCIES

- AI Solution & Platform Architecture
- AI/LLM Integration & Arabic NLP
- PostgreSQL, pgvector & Data Services
- Multi-Tenant SaaS Architecture
- Identity, RBAC & Security-by-Design
- AWS EKS, Kubernetes & CI/CD
- API Integration & AI Governance

PROFESSIONAL DEVELOPMENT

- TOGAF® 10 Enterprise Architecture Foundation
- TOGAF® 10 Enterprise Architecture Practitioner
- ITIL Foundation
- AWS Solutions Architect – Associate

FOCUS PROJECTS AND AI ARCHITECTURE INITIATIVES

MIM Digital Platform Portfolio

Marsad (NIMIC) - nimic.mim.gov.sa

- Guided architecture for modular applications, service/BI integration and platform modernization at MIM; applied security, performance and maintainability considerations to the Marsad portal.

Tarmeez (PSNR) - psnr.mim.gov.sa

- Worked on integration and data-service architecture requirements for Tarmeez (PSNR), including classification, controlled APIs, analytics and privacy-aware access patterns.

GOSI Digital Program Portfolio

GOSI Main Portal - gosi.gov.sa

- Supported application architecture and APIs for GOSI Portal and Public e-Services; contributed to other digital products including Taminaty and internal systems.

Taminaty - taminaty.gosi.gov.sa

- Supported secure self-service patterns and frontend integrations for Taminaty Individual and Taminaty Business.

Labeeb (Ameen at GOSI) - masdr.sa/labeeb

- Key contribution to Labeeb (Ameen at GOSI), supporting Arabic human/virtual-agent interactions and enterprise integrations across chat, voice and video.
- Other delivered GOSI products: Tracker 360, Backoffice, Taqdeer Portal and CRM Portal; additional internal systems are confidential. Contributed to GOSI Super App with the wider team.

PERSONAL PROJECTS & OPEN-SOURCE WORK

Independent AI and digital-product architecture: Hisn demonstrates secure Arabic AI/DLP system design; Loopwell demonstrates Arabic-first enterprise workflow prototyping; open-source packages provide engineering evidence.

Hisn — Full Solution Architecture, Sole Developer & Product Owner

Project: <https://hisnlab.com/>

- Designed and built Hisn end to end, an Arabic-native DLP and AI compliance SaaS platform deployed on private servers for demos on request (product site live at hisnlab.com), mapping use cases to NCA ECC 2.0, PDPL and SAMA CSF controls.
- Defined a four-stage Arabic inspection pipeline (Language → PII → Intent → Risk) and documented tenant-isolation and field-level authorization decisions (ADR-001/002).
- Designed integration of AraBERT-DLP, PostgreSQL/pgvector, Keycloak and API services (NestJS/FastAPI); specified AWS EKS (me-central-1) target deployment architecture.
- Produced architecture evidence: Technical Architecture Document, OpenAPI contract, CI/CD definition, privacy assessment and a seven-portal access model.

DGA Angular — Platforms Code Design System

Live demo: <https://nemreen.info/dga/>

- Designed and published an RTL-first Angular design system and UI component library for Saudi digital government portals, with design tokens, reusable components and portal-shell architecture. Released npm packages @a.nemreen/dga-ui and @a.nemreen/dga-tokens.

loggo — Frontend Logging Package

Live demo: <https://nemreen.info/loggo>

- Authored and published @a.nemreen/loggo (MIT), a zero-dependency TypeScript logging utility providing styled console diagnostics in development and production no-op behavior, replacing console.log/warn/error/table/group/time.

a11y — Accessibility Toolkit

Live demo: <https://nemreen.info/a11y>

- Designed and published @a.nemreen/a11y (MIT), a framework-agnostic accessibility toolkit featuring accessibility profiles, visual filters and a reading mask, with Arabic/English RTL support across Angular, React, Vue and plain HTML.

Loopwell — Arabic-First Feedback & Follow-Up Product Prototype

- Designed and delivered Loopwell as an interactive bilingual feedback-and-follow-up prototype, covering insights, case ownership, assignments and resolution workflows.

Ask Ahmed — RAG AI Assistant (nemreen.info)

- Built Ask Ahmed, a retrieval-augmented (RAG) AI assistant for nemreen.info that answers questions about Ahmed Nemreen's experience and projects using portfolio content.

WORK EXPERIENCE

Technical Lead and Solution Architecture Consultant

Apr 2025 – Present

DIYAR - MIM Project (Riyadh, Saudi Arabia)

At DIYAR on the MIM program, advises on solution and application architecture, enterprise APIs, secure integration and quality attributes. Applies AI-integration and governance thinking to platform decisions while independently developing Hisn as an AI product.

- Translated business and data-service requirements into API-first solution designs and integration patterns for enterprise platforms.
- Guided application security, role-based journeys, performance and maintainability decisions within MIM platform work.
- Reviewed architecture and design choices with frontend, back-end and integration teams.
- Documented trade-offs and implementation expectations spanning discovery, delivery and production improvement.
- Identified privacy, data, security and integration concerns for cross-functional delivery planning.
- Evaluated AI-related opportunities for fit with enterprise controls, practical integration and sustainability.
- Contributed technical governance for code quality, reusable platform patterns and testing expectations.
- Collaborated with DevOps on controlled releases and cloud-oriented platform practices.
- Lead solution and application architecture across enterprise digital platforms, translating business capabilities and non-functional requirements into secure, scalable technical designs.
- Define architecture principles, API-driven integration patterns, engineering standards, reusable platform patterns, and technical solutions with product, design, and back-end teams.
- Lead architecture and technical design reviews and guide engineering decisions across application, integration, identity, performance, and maintainability concerns.
- Own technical decisions from discovery and solution design through implementation, release, and post-production optimization.
- Support Agile planning and estimation while identifying architecture, data, integration, security, and delivery risks and communicating trade-offs.
- Use usability reviews, journey mapping, performance data, and user behavior to ensure technology choices support the intended service experience.
- Evaluate emerging technologies and architecture patterns, including AI-enabled solution opportunities, against business value, security, practicality, and sustainability.
- Contribute to governance covering architecture quality, automated testing, technical debt, privacy considerations, and controlled technology adoption.
- Establish reusable application and interface patterns that support consistent delivery across role-based digital platforms.

Technical Lead | Application Architecture | R&D Engineer

Nov 2023 – Apr 2025

EJADA - GOSI Project (Riyadh, Saudi Arabia)

Guided GOSI application architecture and R&D across customer-facing platforms, including Labeeb (Ameen), while contributing to modular application design, integration patterns and technical reviews.

- Led and mentored a team of developers, providing comprehensive architecture and code reviews and guidance on application structure and framework usage.
- Oversaw the architecture of UI components and platform modules, ensuring reusable and modular design that maintains consistency across applications.
- Enforced architecture and code standards and best practices to uphold high-quality, maintainable codebases.
- Architected robust application frameworks and component libraries for diverse products and platforms.
- Evaluated and selected appropriate frameworks and architecture patterns, such as React and Angular, tailored to specific project requirements.

- Collaborated with back-end developers and DevOps engineers to design seamless integration architecture, tooling, and infrastructure.
- Recommended and implemented advanced performance optimizations at the architecture level.
- Established and enforced coding standards and naming conventions as part of architecture governance across teams.
- Oversee implementation of pixel-perfect, responsive interfaces across platforms and devices, based on UX design mockups and prototypes.
- Apply modern HTML5, CSS3, and JavaScript ES6+ capabilities within the broader application architecture to deliver performant, high-quality implementations.
- Track emerging front-end and platform technologies, advocating for adoption where it strengthens the architecture.
- Contribute to research and development initiatives to explore and integrate new architecture approaches and technologies.
- Track UX design trends, standards, and best practices, guiding the team in adoption of methods that align with the overall platform architecture.

Lead Front-End Developer | UI/UX Developer

Jun 2021 – Oct 2023

EJADA - GOSI Project (Riyadh, Saudi Arabia)

- Led UI/UX design and development for GOSI digital platforms, conducting user research and producing wireframes, prototypes, and visual designs.
- Technically led a team of eight delivering GOSI digital products, mentoring members, conducting code reviews and enforcing coding standards.
- Partnered with product managers, designers, and back-end developers to translate business requirements into user-centric solutions.
- Managed project timelines and task delegation, and introduced process and tooling improvements to strengthen performance and scalability.
- Managed project timelines and task delegation, ensuring on-time delivery of features and updates.
- Mentored junior designers and developers, building a collaborative team culture.

Senior Front-End Developer | UX Developer

Jun 2015 – May 2021

Naseej - GOSI Project (Riyadh, Saudi Arabia)

- Designed and built responsive, user-centered front-end interfaces for GOSI digital platforms, turning UX designs and prototypes into production-ready implementations.
- Led front-end and UX workstreams in collaboration with product, design, and back-end teams, optimizing performance with modern web technologies.
- Integrated front-end implementations with .NET back-end services and modernized legacy web interfaces into responsive, up-to-date experiences.
- Built the front-end and UX foundation that later supported the move into application architecture and technical leadership.
- Develop prototype designs into fully functional websites.
- Utilize expertise in front-end development technologies such as HTML, XHTML, CSS, Java and jQuery to enhance interactivity.
- Create banner ads, email advertisements / newsletters.
- Revamping an old website to new and modern sites.
- Integrate HTML code with .NET.

Senior Front-End Developer

Nov 2013 – May 2015

iHorizons (Amman, Jordan)

Developed and optimized user interfaces, led front-end projects, and collaborated with designers and back-end developers to deliver responsive, performant applications.

- Developing PHP applications, as well as connecting websites with MySQL database and writing queries to retrieve data from it.
- Using web content management systems to manage websites (Joomla / Rama-Vision CMS / WordPress / ...).
- Lead the planning and implementation of projects.
- Track project deliverables using appropriate tools.
- Present reports defining project progress, problems and solutions.
- Quality assurance.

Lead Developer

Apr 2012 – Oct 2013

Chromovision (Amman, Jordan)

Led development projects and managed a team of developers, designing and implementing features while ensuring code quality and application performance.

- Developing PHP applications, as well as connecting websites with MySQL database and writing queries to retrieve data from it.
- Using web content management systems to manage websites (Joomla / Rama-Vision CMS / WordPress / ...).
- Lead the planning and implementation of projects.
- Track project deliverables using appropriate tools.
- Present reports defining project progress, problems and solutions.
- Quality assurance.

Web Developer

Mar 2011 – Apr 2012

Chromovision (Amman, Jordan)

Developed and maintained websites, collaborated on feature implementations, debugged issues, and optimized performance using HTML, CSS, and JavaScript.

- Developing PHP applications, as well as connecting websites with MySQL database and writing queries to retrieve data from it.
- Using web content management systems to manage websites (Joomla / Rama-Vision CMS / WordPress / ...).
- Quality assurance.

Consulting Assistant and ARIS Tools Technical

Jul 2010 – Feb 2011

Reach Group (Amman, Jordan)

Assisted with business process consulting and reengineering using ARIS Tools, developing process architectures and workflow diagrams and preparing documentation — early exposure to enterprise process modeling that continues to inform an architecture-oriented, business-aligned approach to technology delivery.

- Participating in providing consulting services regarding business process management and reengineering.
- Participating in improving processes to reduce waste and continuously improve performance.
- Perform continuous reviews to align processes with business changes.
- Develop business process architectures, process relationship maps, functional relationship maps, cross-functional maps and workflow diagrams using the ARIS BPM tool.
- Research industry trends, best practices and improvement opportunities from all sectors.
- Interviewing client's employees, management team and other stakeholders.
- Preparing all reports, forms and documents needed for business process reengineering.

Technical Support

Dec 2009 – Jul 2010

Network Exchange Technology (Amman, Jordan)

Handled technical support for ISP services, including troubleshooting, device setup, and network maintenance.

- VOIP System (devices configuration and setup, and billing system management).
- Troubleshooting problems (Dialup – ADSL – Mdaemon Mail Server).
- Maintenance (hardware and software).
- NOC.
- Routing configuration.
- Good knowledge and background in Bluecoat and Fortinet.

EDUCATION

BSc in Computer Information Systems

Sep 2005 – Feb 2009

Al-Hussain Bin Talal University, Ma'an – Jordan

SKILLS

ARCHITECTURE, ENGINEERING & TECHNICAL SKILLS

AI Architecture & Governance

- AI Solution Architecture: Business Use Cases, Processing Pipelines, Model and Platform Integration
- Integration: API & Integration Architecture, RESTful Services, OpenAPI, RBAC, Omnichannel Platform Integration, Headless CMS, BI / Reporting (Power BI, SSRS)
- Governance: Architecture Decisions, Technical Architecture Documents, OpenAPI Contracts, Reviews
- Security & Privacy: RBAC, Field-Level Access, Keycloak, Privacy Impact Assessment, Security-by-Design
- Quality Attributes: Scalability, Performance, Multi-Tenancy, Maintainability, Technical Risk

AI Cloud & Platform

- Cloud: AWS platform design, AWS me-central-1 target deployment architecture (Hisn)
- Identity & Platform: Keycloak / IAM, Schema-per-Tenant Isolation, Role-Isolated Portals (Hisn)

AI Application Architecture

- Frameworks: Angular, Nx, React, TypeScript, NestJS (Hisn), FastAPI (Hisn)
- AI Platform Integration: REST APIs, OpenAPI Contracts, Role-Based Application Design
- Content & Enterprise Platforms: Headless CMS, Digital Portals, API Integration

Data & AI Engineering

- Data: PostgreSQL, pgvector, Schema-per-Tenant Multi-Tenancy (Hisn)
- AI / NLP: AI/LLM Integration, Arabic NLP, AraBERT-DLP, Language / PII / Intent / Risk Pipeline (Hisn), Arabic Conversational AI (Labeeb)

Leadership & Delivery

- Team Leadership: Leading and Mentoring Teams, Team Management
- Project Leadership: Task Delegation, Timeline Management, Comprehensive Code Reviews
- Continuous Improvement: Research and Development, Adoption of New Technologies
- Mentorship: Training Junior Developers, Fostering Collaborative Work Environments
- Delivery Tools: JIRA, Trello, Asana

UX & Digital Platforms

- UI/UX Design: Wireframing, Prototyping, Visual Design, User Research
- Design Systems & Accessibility: Reusable Component Libraries, Accessibility, RTL/Bilingual Platforms
- Responsive Design: Cross-platform Compatibility, Mobile-first Design
- Performance Optimization: Code Optimization, Performance Tuning

Soft Skills

- Collaboration: Cross-functional Team Collaboration, Effective Communication
- Problem-Solving: Troubleshooting, Debugging
- Consulting: Business Process Management, Reengineering

Earlier Technologies

Version Control: Git, SVN

Task Runners: Webpack, Gulp, Grunt

Backend Integration: API Integration, .NET Integration

Content Management Systems: Joomla, WordPress, Rama-Vision CMS

Database: MySQL, SQL Queries

Technical Support: VOIP System Setup, Network Troubleshooting, Device Configuration, Bluecoat and Fortinet

Business Process: ARIS Tools, Process Mapping, Workflow Optimization

Design Tools

Figma • Adobe XD • Adobe Photoshop • Adobe Illustrator • Adobe InDesign

LANGUAGES

Arabic — Native **English** — Proficient