

Hamed Bayani

Enterprise Solutions Architect | Technical Lead | Backend & AI Systems

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PROFESSIONAL SUMMARY

Enterprise Solutions Architect and Technical Lead with 23+ years of experience designing, modernizing, and integrating enterprise software, industrial systems, scalable backend platforms, and AI-enabled solutions. Hands-on expertise spans C# / ASP.NET Core, SignalR, DDD/CQRS/Vertical Slice, API and realtime integration, DevOps and observability, identity and security, SCADA/IoT, and LLM/RAG-based enterprise AI. Known for bridging software, infrastructure, security, and operational teams and for driving work from architecture and contract discovery through implementation, verification, and deployment readiness.

CORE COMPETENCIES

Architecture & Leadership: Enterprise Architecture, Solution Design, DDD, CQRS, Vertical Slice, Modular Architecture, Microservices, Technical Leadership, Cross-team Coordination

Backend & Integration: C#, ASP.NET Core (.NET 7/8+), SignalR, REST, gRPC, SOAP, Socket Programming, Python, JavaScript, Dapper, SQL

AI & Automation: LLM, RAG, AI Agents, Enterprise Knowledge Retrieval, Citation-aware Workflows, n8n, Workflow Automation

DevOps & Platform: Azure DevOps, CI/CD, Docker, ELK, OpenTelemetry, Consul, Vault, PowerShell, Service Discovery, Runtime Readiness

Security & Identity: SSO, OIDC, Identity Management, Centralized Access Control, Secret Handling, Secure Defaults

Industrial & Business Systems: SCADA, IoT, Hardware Integration, CMMS, ERP/BMS, Production and Maintenance Systems

Quality Engineering: Unit/Integration Testing, Precheck Gates, Fail-closed Automation, Rollback-aware Delivery, Manifest/SHA256 Validation, Secret Scanning

PROFESSIONAL EXPERIENCE

Backend Lead & Technical Coordinator

Aug 2022 - Present

Giti Pasand Fava | Isfahan, Iran

- Architect and evolve enterprise backend frameworks using Vertical Slice Architecture with DDD/CQRS-oriented boundaries, maintainable modules, and explicit integration contracts.
- Lead design and delivery of enterprise production and maintenance solutions, including CMMS capabilities and integration with operational and hardware-facing systems.
- Automate CI/CD and platform operations with Azure DevOps and Docker; integrate observability and infrastructure capabilities using ELK, OpenTelemetry, Consul, Vault, and SSO.
- Act as the technical bridge between software, infrastructure, security, and operational stakeholders, resolving cross-boundary dependencies and deployment-readiness issues.
- Design enterprise AI and automation solutions using LLM/RAG patterns, AI agents, and n8n-based integration workflows to improve access to organizational knowledge and reduce repetitive integration work.
- Established an evidence-driven AI-assisted engineering practice using source/contract discovery, bounded change plans, prechecks, automated tests, rollback controls, clean-package verification, SHA256/manifest validation, secret scanning, and fail-closed execution gates.
- Contributed to hardening realtime service and mobile integration patterns, including SignalR communication, secure local state, reconnect/backoff, idempotency, and runtime verification.

Head of IT Department

May 2017 - Jul 2022

Kavosh Electronic | Isfahan, Iran

- Managed critical software and hardware infrastructure and coordinated operational continuity across business systems.
- Designed and implemented organizational software systems and improvements spanning software, infrastructure, access, and security concerns.
- Led cross-functional coordination between technical teams and business stakeholders, translating operational needs into maintainable technical solutions.

Head of Technical Department

May 2014 - Apr 2017

Arsh Rayan | Isfahan, Iran

- Led the technical team in designing and delivering enterprise software systems.
- Developed and maintained industrial automation solutions with direct hardware integration and field-facing operational requirements.

Developer & Support Engineer

Jan 2004 - Mar 2017

Earlier Roles: Nik Rayaneh, Parto Ara, Yam, Novin System, SabaGostar Irsa, Tarh Sanat Behpooyesh | Isfahan, Iran

- Developed and supported organizational systems for finance, accounting, payroll, inventory, sales, and after-sales service.
- Built broad hands-on experience across application development, customer support, business-process analysis, data handling, and production troubleshooting.

SELECTED PROJECTS & CASE STUDIES

GitiBot - Enterprise AI Assistant | [Resume-backed enterprise project](#)

Designed and implemented an LLM/RAG-based enterprise assistant for 14 factories, enabling faster access to organizational information across finance, HR, insurance, and related knowledge domains.

Focus: LLM, RAG, Enterprise AI, Knowledge Retrieval

Enterprise Knowledge & AI Platform | [Sanitized enterprise case study](#)

Architecture and hardening work for a controlled enterprise knowledge platform supporting organizational memory, retrieval with citations, analysis, and decision support, with governance and identity-readiness considerations.

Focus: Enterprise AI, RAG, Organizational Memory, Governance, SSO Readiness

Realtime Communication Platform | [Sanitized enterprise case study](#)

Engineering and hardening of a realtime platform spanning .NET/SignalR services and an Android/Kotlin client, with emphasis on secure state, resilient reconnect behavior, idempotent messaging, runtime safety, and automated validation.

Focus: ASP.NET Core, SignalR, Kotlin, Realtime, Security, Resilience

Hami - Personal / Family Finance OS | [Personal R&D](#)

Developed a local-first Android financial-management platform concept and implementation covering accounts, transactions, budgeting, reporting, commitments, Persian UX, and secure local data handling. Treated as personal R&D rather than a public production claim.

Focus: Android, Kotlin, Local-first, Personal Finance, Room, Automation

Hydrological Resource Monitoring System | [Resume-backed industrial project](#)

Developed SCADA + IoT software for monitoring wells and aqueducts in a water-resource environment, connecting operational data acquisition with monitoring workflows.

Focus: SCADA, IoT, Monitoring, Industrial Software

Integrated ERP/BMS for Specialized Materials Trade | [Resume-backed enterprise project](#)

Designed and implemented an integrated ERP/BMS solution covering sales, marketing, inventory, and accounting for specialized stone and slab trading operations.

Focus: ERP, BMS, Sales, Inventory, Accounting

Enterprise Integration Layer via n8n | [Resume-backed integration project](#)

Implemented complex no-code/low-code automations to connect heterogeneous enterprise systems, reduce repetitive custom integration work, and improve process agility.

Focus: n8n, Automation, Integration, Workflow

Advanced CAD for Textile Patterning | [Resume-backed engineering project](#)

Developed specialized CAD software for carpet and textile design, improving design and production workflows in a domain-specific industrial environment.

Focus: CAD, Textile, Production, Domain Software

AI-ASSISTED ENGINEERING & DELIVERY PRACTICE

- Use AI as an engineering force multiplier for source discovery, contract analysis, design review, test design, documentation, and automation while keeping technical accountability and final decisions human-owned.
- Apply explicit preconditions and fail-closed gates before sensitive changes; distinguish verified facts from assumptions and unresolved environment dependencies.
- For scripts and change runners, require two independent logic reviews plus syntax/self-test/error-path checks where applicable.
- Produce auditable evidence for executed work: build/test results, passed/failed/skipped counts, exit codes, clean reruns, rollback outcomes, manifest/hash validation, and secret-scan results.

CERTIFICATIONS & CONTINUING EDUCATION

- ASP.NET Core Security - Toplearn
- SignalR in ASP.NET Core - Toplearn
- Clean Architecture & SOLID Principles - Toplearn
- Clean Architecture in ASP.NET Core - Toplearn
- Progressive Web Apps (PWA) - Toplearn
- ASP.NET Core Razor Pages - Toplearn
- ML.NET - Toplearn
- Dapper in ASP.NET Core - Toplearn
- Parallel Programming in .NET Core - Toplearn
- Blazor - Nikamooz Institute (certified by Iran Technical & Vocational Training Organization)

EDUCATION

Associate Degree in Software Engineering - University of Applied Science and Technology (Alavijeh), Isfahan, Iran
| 2007 - 2009

LANGUAGES

Persian: Native

English: Working proficiency across reading, writing, speaking, and listening

PROFESSIONAL STRENGTHS

Enterprise problem solving, architecture trade-off analysis, technical negotiation, cross-team coordination, ownership, documentation discipline, and hands-on troubleshooting across software, infrastructure, security, and industrial environments.