Babak

AI Solutions Architect & Senior Software Engineer

Kayseri, Türkiye | BabakAI.Dev@outlook.com | babakai.dev | linkedin.com/in/yazilimai | upwork.com/freelancers/yazilimai

Resident in Türkiye since 2013 · Available immediately for full-time, part-time or project-based work.

PROFESSIONAL SUMMARY

AI Solutions Architect and Senior Software Engineer with 20+ years of end-to-end software delivery and a strong Microsoft Azure and .NET background. Hands-on work in enterprise AI platforms, RAG copilots, live voice assistants, developer tools and finance systems, with governed tool access and human approvals. Experience spans requirements, architecture, coding, integrations, testing, deployment and support, for clients in Australia, the United States and Ireland.

CORE SKILLS

AI & agents	Azure OpenAI, Microsoft Foundry, Anthropic Claude, Google Gemini, Azure AI Search, RAG, Azure Document Intelligence, Microsoft Agent Framework, Tool calling, Live voice (Realtime, WebRTC), AI safety controls
Software engineering	C#, .NET 8/9/10, ASP.NET Core, Blazor Server & WebAssembly, EF Core, Syncfusion, Python, TypeScript, JavaScript, React, Next.js, Angular, FastAPI
Data & analytics	SQL Server, Azure SQL, PostgreSQL, Redis, Microsoft Fabric, Dataflow Gen2, Lakehouse, Delta Lake, PySpark, Pandas, Power BI
Cloud & delivery	Azure Functions, Azure App Service, Azure Service Bus, Azure Blob Storage, Azure Key Vault, OpenTelemetry / Application Insights, GitHub Actions, GitHub Apps & Checks, Azure DevOps, Docker, Bicep, Terraform, AWS (S3, CloudFront, AWS CDK)
Engineering practice	Architecture & solution design, Requirements analysis, Automated testing (xUnit), CI quality gates, Threat modelling for AI features, AI-assisted engineering (Claude Code, Codex, Copilot)

PROFESSIONAL EXPERIENCE

Independent AI Solutions Architect — 2025 – present

Independent product development · Kayseri, Türkiye

Selected products

- **Enterprise AI Platform** — Live. A reusable .NET 10 platform: one shared AI core, composable business modules, industry editions and separately deployable hosts. Multi-model (Azure OpenAI, Claude, Gemini) with RAG, audit trails and human approvals.
- **Hotel AI Concierge** — Live demo. Bilingual Turkish/English guest concierge grounded in hotel documents and a live rate engine — cited answers, quotes computed by code with no model call, consented reservation requests and WebRTC live voice.
- **Finance & Accounting with AI Copilot** — Engineering complete. Multi-company double-entry accounting with approval and posting workflows, reports, budgets and cash-flow forecasting. Its copilot takes every figure from typed tools, and code verifies the narrative before anyone reads it.
- **BabakAI.Dev — Personal Portfolio** — Live. I built this bilingual portfolio with React, Next.js and TypeScript, and defined its Amazon S3 and CloudFront infrastructure with AWS CDK.

AI Solutions Architect & Senior Software Engineer — 2023 – 2026

Freelance client engagements via Upwork · Remote

AI Code Review Platform — Australian software company

- Architected and developed an Azure-based advisory review platform that combines deterministic structural analysis with Azure OpenAI semantic review of GitHub pull requests, with an Azure DevOps integration path.
- An event-driven .NET 9/10 backend with Azure Functions, Service Bus, ASP.NET Core and EF Core on Azure SQL, wired to GitHub Apps, webhooks and Checks; I also contributed to the CLI and VS Code review workflows.
- A React/TypeScript dashboard for reviews, findings by severity and type, policy metrics, repository onboarding and organisation-level AI settings.
- Organisation access controls, audited management APIs, signed policy synchronisation, Windows-protected policy caching and bounded retention of finding evidence.
- Optional Microsoft Agent Framework orchestration, tenant-scoped Azure AI Search RAG with citations and configurable second-model validation — findings stay advisory and never block a merge.

AI Deliverables Copilot — Australian enterprise client

- Led .NET backend development for generating communication plans, stakeholder matrices and training plans with Azure OpenAI.
- Built document ingestion on Azure Functions and metadata-filtered Azure AI Search retrieval, so each deliverable draws only on the right project's documents.
- Validated the model's JSON output before turning it into tables, so a malformed answer is caught instead of reaching a document.

Logistics Copilot on Microsoft Fabric — United States enterprise client

- Replatformed the logistics ETL to Microsoft Fabric Dataflow Gen2 and a Lakehouse on Delta tables.
- Built PySpark transformations, SQL views and Power BI models for shipment KPIs.
- Designed two answer paths for the copilot: structured data for KPI questions, and Azure AI Search with Document Intelligence for contract questions.

Guided Assessment & DPIA Assistant — Public-sector health organisation, Ireland

- Developed a Blazor/.NET platform for guided assessments, form completion and summaries using Azure OpenAI, Azure AI Search and Azure SQL.
- Added PDF-based form generation and configurable prompts.
- Built workflow services and an audit history for assessments.

Also: Azure AI/RAG assistants and a Blazor/Syncfusion website for a furniture manufacturer; ERP requirements analysis and database design.

Software Engineer 2022 — 2023
B&B Bilişim · Kayseri, Türkiye

- Architected and developed the Skoda sales and test-drive system with Azure, .NET, Blazor Server/WebAssembly/PWA and Syncfusion.
- Integrated document OCR, protected REST APIs and Oracle data access.

IT Manager & Software Developer 2013 — 2022
Saman Insurance agency · Remote

- Built CRM and policy automation with C#, ASP.NET, Azure SQL and Xamarin.
- Used Python and machine-learning tools for life-insurance analysis.
- Managed the agency's IT remotely.

AI-ASSISTED SOFTWARE ENGINEERING

- Combine hands-on coding and debugging with Claude Code and OpenAI Codex for implementation support, automated testing and independent AI-assisted code review.
- Set scope and acceptance criteria, review code changes and test evidence, and guide corrections. Retain responsibility for architecture, code quality and final integration and deployment decisions.

EARLIER EXPERIENCE

Project Manager & Developer · Software engineering company 2003 — 2013
Led ERP delivery across finance, accounting, payroll, warehouse and sales. Managed requirements, database design, implementation, deployment and client support with SQL Server, VB6, C# and WinForms.

Freelance Software Developer · Various clients 1999 — 2003
Developed desktop and database applications using Pascal, C/C++, Visual C++, Microsoft Access and Oracle.

EDUCATION

Bachelor's degree in Software Engineering
Islamic Azad University, Central Tehran Branch · 1995 – 2001

LANGUAGES

English — Professional working proficiency (B2)
Turkish — Conversational