



2026 / SOFTWARE • AGENTIC AI • TALENT

SERVICES PORTFOLIO

Expert System Solution (ESS) — a full-spectrum software house delivering bespoke software development, enterprise integrations, staff augmentation and next-generation Agentic AI solutions worldwide.



Strategic Business Partner with PITB (Govt. Punjab, Pakistan)



Incorporated with Pakistan Software Export Board

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Expert System Solution (ESS) is a full-spectrum software house delivering cutting-edge technology services to clients across the globe. From bespoke software development and enterprise integrations to staff augmentation and next-generation Agentic AI solutions, ESS brings deep technical expertise and a commitment to excellence to every engagement.

Our team of experienced engineers, architects, data scientists, and AI specialists work hand-in-hand with clients to design, build, and scale solutions that drive measurable business outcomes. With 10+ years of industry experience and 200+ successful projects delivered across 25+ industries worldwide, ESS has built a strong reputation for reliability, innovation, and results.

10+

YEARS OF INDUSTRY
EXPERIENCE

200+

SUCCESSFUL PROJECTS
DELIVERED

25+

INDUSTRIES SERVED
WORLDWIDE

LAHORE
Pakistan

PORTO
Portugal

IRVING, TX
United States



VETTED ENGINEERING TALENT

Every ESS engineer goes through a rigorous technical evaluation process, ensuring clients gain access to vetted, top-tier talent ready to solve complex challenges efficiently.



AGILE-FIRST DELIVERY

Our Agile-first delivery approach, including structured sprints, daily stand-ups, and transparent progress tracking, keeps projects moving fast while maintaining full client visibility.



SECURITY & IP PROTECTION

We prioritize security and IP protection through NDA-first engagements, safeguarding your code, data, and confidential business assets at every stage.



TRANSPARENT COLLABORATION

With dedicated project managers, real-time reporting, and direct communication channels, ESS ensures smooth collaboration and complete transparency throughout the engagement.

1. SOFTWARE DEVELOPMENT SERVICES

ESS provides end-to-end software development services tailored to the unique needs of each client, from startups building their first product to enterprises modernizing legacy systems.



Custom Software Development

1.1

- Bespoke web and desktop application development
- API design, development & integration
- Microservices and serverless architecture
- Legacy system modernization & re-engineering
- SaaS product development



Mobile Application Development

1.2

- Native iOS & Android development
- Cross-platform development (React Native, Flutter)
- Mobile-first UX/UI design
- App Store & Play Store deployment & management



Web Development

1.3

- Responsive frontend development (React, Next.js, Vue.js, Angular)
- Backend development (Node.js, Django, Laravel, Spring Boot, FastAPI)
- Progressive Web Apps (PWA)
- E-commerce platforms (Shopify, WooCommerce, custom)



Enterprise Software & ERP/CRM

1.4

- Custom ERP & CRM development
- Third-party ERP integration (SAP, Oracle, Microsoft Dynamics)
- Business process automation (BPA)
- Workflow management systems



Cloud Solutions & DevOps

1.5

- Cloud-native application development (AWS, Azure, GCP)
- CI/CD pipeline setup and management
- Infrastructure as Code (IaC) with Terraform & Pulumi
- Containerization & orchestration (Docker, Kubernetes)
- Cloud migration & optimization



Quality Assurance & Testing

1.6

- Manual and automated testing (Selenium, Cypress, Playwright)
- Performance, load & stress testing
- Security testing & penetration testing
- API testing (Postman, REST Assured)

2. AGENTIC AI SERVICES

ESS is at the forefront of the Agentic AI revolution – building autonomous, goal-driven AI systems that reason, plan, and act with minimal human intervention. Our Agentic AI practice helps organizations unlock transformative value through intelligent automation and human-AI collaboration.



AI Agent Design & Development

2.1

- Custom LLM-powered autonomous agents
- Multi-agent system architecture (CrewAI, AutoGen, LangGraph)
- Tool-using and function-calling agents
- Memory-augmented agents (short-term & long-term memory)
- Retrieval-Augmented Generation (RAG) pipelines



Workflow & Process Automation

2.2

- Agentic RPA (Robotic Process Automation) with AI reasoning
- Document processing and intelligent data extraction agents
- Email & calendar automation agents
- Customer support and triage agents
- Research & summarization agents



Conversational AI & Chatbots

2.3

- Enterprise-grade chatbot development (GPT-4, Claude, Gemini)
- Domain-specific fine-tuned models
- Omnichannel deployment (Web, WhatsApp, Slack, Teams)
- Sentiment analysis & intent classification pipelines
- Voice AI agents (speech-to-text & text-to-speech integration)



AI-Powered Data & Analytics

2.4

- Predictive analytics and forecasting models
- NLP pipelines for unstructured data
- Computer vision solutions (object detection, OCR, image classification)
- Recommendation engines
- AI dashboards and reporting



LLM Integration & Fine-Tuning

2.5

- OpenAI GPT, Anthropic Claude, Google Gemini, Meta LLaMA integration
- Custom model fine-tuning on proprietary datasets
- Prompt engineering and evaluation frameworks
- LLM observability and monitoring (LangSmith, Helicone, Langfuse)
- On-premise LLM deployment for data-sensitive organizations



AI Strategy & Consulting

2.6

- AI readiness assessment
- Use-case identification and prioritization
- MLOps maturity roadmap
- Responsible AI & governance frameworks
- AI center of excellence (CoE) setup

3. STAFF AUGMENTATION SERVICES

ESS's staff augmentation practice provides businesses with on-demand access to highly skilled technology professionals – fully integrated into your existing teams, processes, and culture. Scale up or down at the speed your business demands.



3.1 AUGMENTATION MODELS

	Dedicated Resource Model – a vetted professional works exclusively on your project, fully aligned with your team
	Team Extension Model – plug-and-play squads that integrate with your in-house team and your SDLC
	Project-Based Augmentation – end-to-end project delivery with ESS resources under your supervision
	On-Demand Talent Pool – rapid access to specialized talent for short-term sprints or critical deliverables

3.3 WHY STAFF AUGMENTATION WITH ESS?

Rapid onboarding – resources ready within 1-2 weeks	Pre-vetted talent with technical assessments and background checks
Flexible engagement – part-time, full-time, or project-based	Seamless timezone overlap and communication
Full IP and NDA protection for your projects	Dedicated account management and performance reviews

3.2 ROLES AVAILABLE FOR AUGMENTATION

 Software Engineering Frontend, Backend, Full-Stack, Mobile Developers	 AI & Data ML Engineers, Data Scientists, AI Researchers, Data Engineers
 Cloud & DevOps Cloud Architects, DevOps Engineers, SREs, Platform Engineers	 QA & Testing QA Engineers, Automation Testers, Performance Testers
 Design UI/UX Designers, Product Designers, UX Researchers	 Product & Management Product Managers, Scrum Masters, Technical Project Managers
 Security Cybersecurity Analysts, Pen Testers, Security Architects	 Business Analysis Business Analysts, Systems Analysts, Requirements Engineers

4. TECHNOLOGY STACK

ESS engineers are fluent across a comprehensive range of modern technologies, enabling us to recommend and deliver the best-fit stack for every client engagement.



4.1 FRONTEND DEVELOPMENT

-  **React.js / Next.js** – SPAs, SSR web apps, enterprise dashboards
-  **Vue.js / Nuxt.js** – progressive web apps, content-driven sites
-  **Angular** – large-scale enterprise frontends
-  **React Native** – cross-platform mobile (iOS & Android)
-  **Flutter** – high-performance cross-platform mobile & desktop
-  **TypeScript** – type-safe JavaScript across all frontend frameworks
-  **Tailwind CSS / SCSS** – utility-first and custom styling systems

4.4 DATABASES

-  **Relational (SQL)** – PostgreSQL, MySQL, Microsoft SQL Server, SQLite
-  **NoSQL Document** – MongoDB, CouchDB, Firebase Firestore
-  **In-Memory / Cache** – Redis, Memcached
-  **Graph** – Neo4j, Amazon Neptune
-  **Time-Series** – InfluxDB, TimescaleDB
-  **Search** – Elasticsearch, OpenSearch
-  **Vector** – Pinecone, Weaviate, ChromaDB, pgvector

4.2 BACKEND DEVELOPMENT

-  **Node.js / Express / NestJS** – high-performance REST & GraphQL APIs
-  **Python / Django / FastAPI** – data-heavy apps, ML backends, rapid APIs
-  **PHP / Laravel** – CMS, e-commerce, enterprise web apps
-  **Java / Spring Boot** – enterprise microservices, banking & fintech
-  **.NET / C#** – enterprise Windows and cloud-native apps
-  **Go (Golang)** – high-throughput microservices, CLIs
-  **Ruby on Rails** – rapid MVP development, SaaS platforms

4.5 CLOUD & DEVOPS

-  **Cloud Platforms** – AWS, Microsoft Azure, Google Cloud Platform (GCP)
-  **Containerization** – Docker, Kubernetes (EKS, GKE, AKS)
-  **Infrastructure as Code** – Terraform, Pulumi, AWS CloudFormation
-  **CI/CD** – GitHub Actions, GitLab CI, Jenkins, CircleCI, ArgoCD
-  **Monitoring & Observability** – Prometheus, Grafana, Datadog, New Relic, ELK Stack
-  **Serverless** – AWS Lambda, Azure Functions, Google Cloud Functions
-  **API Gateway** – Kong, AWS API Gateway, NGINX, Traefik

4.3 AI & MACHINE LEARNING STACK

-  **Python (PyTorch, TensorFlow, Keras)** – model training, computer vision, NLP
-  **LangChain / LangGraph** – LLM orchestration, agentic workflows
-  **OpenAI / Anthropic / Gemini API** – GPT-4, Claude, Gemini LLM integration
-  **Hugging Face Transformers** – open-source model deployment & fine-tuning
-  **CrewAI / AutoGen** – multi-agent system development
-  **Pinecone / Weaviate / ChromaDB / Qdrant** – vector databases for RAG systems
-  **LlamaIndex** – data ingestion and RAG framework
-  **LangSmith / Helicone** – LLM observability and evaluation
-  **Ollama / vLLM** – local and self-hosted LLM inference
-  **scikit-learn / XGBoost** – classical ML models and predictions

4.6 OTHER TOOLS & PLATFORMS

-  **Version Control** – Git, GitHub, GitLab, Bitbucket
-  **Project Management** – Jira, Trello, Asana, Linear, Notion
-  **Communication** – Slack, Microsoft Teams, Zoom
-  **Design & Prototyping** – Figma, Adobe XD, Zeplin
-  **Testing** – Jest, Cypress, Playwright, Selenium, Postman
-  **Blockchain** – Ethereum, Solidity, Hardhat, Web3.js (on demand)
-  **CMS** – WordPress, Contentful, Sanity, Strapi



5. ENGAGEMENT MODELS

ESS offers flexible engagement structures to match your project scope, budget, and timeline.

-  **Fixed-Price Projects** – defined scope, timeline, and budget – ideal for well-specified projects
-  **Time & Material (T&M)** – flexible billing based on hours – perfect for evolving requirements and agile teams
-  **Dedicated Team** – a fully managed, cross-functional team allocated exclusively to your product
-  **Milestone-Based** – deliverable-driven payments aligned to project milestones
-  **Retainer Model** – ongoing monthly capacity for support, maintenance, or continuous development

6. WHY CHOOSE ESS?

- Proven expertise across **50+ technology stacks**

Transparent communication with weekly reporting and real-time project dashboards

NDA-first approach – your IP is always protected

Competitive pricing with no compromise on quality
- Dedicated **Agentic AI practice** – not just chatbots, but intelligent autonomous systems

ISO-compliant software development processes aligned with industry best practices

Post-launch support, maintenance, and SLA-backed agreements

A team that treats your success as our success – It's all about succ'ESS™

7. GET IN TOUCH

Ready to build something extraordinary?

Contact us today and let us bring your vision to life.

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