

Applied AI, data and software systems for industry — designed, built and operated end to end.

LEGAL FORM	ESTABLISHED	LOCATION	LANGUAGES	VAT
Sole proprietorship	June 2026	Lower Austria, Austria	English, German, Tamil	ATU83389824

WHO WE ARE

Pradeep Kumar is an independent Austrian technology practice that designs, builds and operates AI, data and software systems for industrial, logistics and regulated organisations.

We work with companies that have serious operational problems and no dedicated AI or data team. A typical engagement begins with a bottleneck — dispatch decisions made on intuition, reporting that takes three days, compliance evidence scattered across mailboxes — and ends with a system in production that people use every day. We remain responsible for that system after it goes live.

The practice was established in 2026. The principal has worked in operational IT since 2002 — in telecommunications, banking and iGaming, latterly as Head of IT of an international gaming technology company and as Chief Technology Officer of an Austrian group of companies.

CAPABILITIES

Applied AI

LLM-based assistants and agents, document and speech understanding, decision support, operational optimisation and forecasting. Model selection driven by cost and reliability, not novelty.

Software Engineering

Custom platforms, services and internal tools — from prototype through production hardening, authentication, role models and audit trails.

Security & Compliance Engineering

Hardening, penetration-test remediation, access and tenancy models, GDPR and EU AI Act implementation, audit-ready evidence and logging.

Data & Systems Integration

Connecting ERP, production, logistics and financial systems into data foundations that can actually be queried, trusted and reported on. Migration of legacy databases and interfaces.

Infrastructure & Operations

Cloud and on-premise architecture, virtualisation, monitoring and alerting, backup and disaster recovery, network and firewall design, incident response.

Advisory

Feasibility studies, architecture and code reviews, AI readiness assessments, build-versus-buy analysis, and technical due diligence.

HOW WE WORK

- **Senior-only delivery.** No junior layers billed to the client and no handover chains. The person who designs the system builds and operates it.
- **Working software early.** Short, clearly scoped increments in production rather than long specification phases that end in a document.
- **Accountable across the full chain.** Feasibility, architecture, build, deployment, operation and maintenance — one point of responsibility.
- **Honest on build versus buy.** Where a proven product already solves the problem, we say so instead of building. Our value is judgement, not billable hours.
- **Cost-aware by design.** We deliver for organisations where budget is a hard constraint, and we treat running cost as a design requirement from the first architecture decision.

TECHNOLOGY

AI & ML	Large language models and agent frameworks, speech recognition and diarisation, document understanding, retrieval-augmented generation, optimisation and routing engines
Engineering	Python, TypeScript / Node, C# / .NET, SQL; REST and real-time APIs; PostgreSQL, SQL Server
Platform	Linux and Windows Server, Docker, Proxmox, cloud and on-premise deployment, Prometheus / Grafana monitoring, automated backup and disaster recovery
Business systems	ERP and financial systems integration, reporting and BI, identity and access management

SELECTED WORK

Engagements delivered by the principal in current and prior professional roles. Client names withheld; details available on request.

TRANSPORT & LOGISTICS — AUSTRIA

AI-assisted dispatch and route optimisation

- CHALLENGE** Dispatchers assigned orders to drivers manually under time pressure. Assignment quality depended entirely on individual experience, and that knowledge was not transferable to new staff.
- SOLUTION** A recommendation service reading live ERP and order data, combining real routing distances, driver capability profiles and customer-specific constraints. Delivered as advisory output alongside the existing dispatch system, with a human always making the final decision.
- RESULT** **Top-recommendation accuracy improved from 6% to 26% measured against the dispatchers' own choices. Deployed on the client's own infrastructure at negligible marginal running cost.**

CUSTOMER OPERATIONS — SPEECH AI

Voice agent and call-intelligence pipeline

- CHALLENGE** High inbound call volume for routine bookings, and years of recorded customer conversations containing operational knowledge that nobody could access.
- SOLUTION** An AI voice agent handling structured inbound requests through a purpose-built API gateway into the operational system, plus a transcription and speaker-diarisation pipeline turning the historical call archive into a searchable knowledge base.
- RESULT** **Over 3,000 historical calls processed into structured, searchable records; routine call handling automated with defined escalation to human staff.**

REGULATORY TECHNOLOGY — HIGHLY REGULATED SECTOR

Compliance automation across multiple jurisdictions

- CHALLENGE** Operators in a heavily regulated industry must evidence compliance against divergent and frequently changing national rulebooks — work traditionally done manually by expensive specialists.
- SOLUTION** A multi-tenant platform mapping over 130 controls across 25 jurisdictions, with AI-assisted regulatory change monitoring, structured evidence management, tenant-level data isolation and audit-ready reporting. Human review is mandatory before any regulatory conclusion is issued.
- RESULT** **Compliance assessment reduced from weeks of specialist work to a reviewable, evidence-linked report. Independently penetration-tested; all findings remediated.**

ALSO DELIVERED

- **Infrastructure consolidation.** Migration of a distributed legacy estate onto a consolidated virtualisation platform, with centralised monitoring, alerting and offsite backup.
- **Database performance engineering.** Diagnosis and remediation of production query timeouts, taking a critical business process from 30-second failures to sub-second execution.
- **Security incident response.** Containment, forensic assessment, clean recovery and hardening of a compromised public-facing web platform.

RESPONSIBLE AI AND COMPLIANCE

We treat governance as an engineering requirement, not a policy annex. Systems we deliver are designed to be explainable to the people who depend on them, to record the decisions they make, and to keep a human in the loop for consequential outcomes. We implement GDPR obligations and EU AI Act requirements as part of the build rather than as documentation added afterwards, and we support data residency on client-controlled infrastructure where sovereignty matters. Pradeep Kumar is a signatory to the AIM Global Pledge on responsible AI in industry and manufacturing.

Pradeep Kumar

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