

PRATIK DHANAVE

Senior Software Engineer

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PROFESSIONAL SUMMARY

Senior Software Engineer with 7+ years designing and shipping Agentic AI solutions, autonomous AI workflows, and production-grade distributed systems in [Python](#) and [Go](#) on [Kubernetes](#), [GCP](#), [AWS](#), and [Azure](#). Hands-on multi-agent orchestration ([LangGraph](#), [Google ADK](#), Microsoft [MARA](#), [MCP](#), [CrewAI](#), [AutoGen](#)), LLMs (prompt engineering, RAG architecture, memory management, agent workflows), and Vector Databases (pgvector, [Pinecone](#), [AlloyDB AI](#)) for semantic search and knowledge retrieval. Authored Genie (Go multi-agent on MARA) and Bodh (MAI-DxO medical AI panel). Core contributor to Google's open-source Spanner Migration Tool — CDC pipelines on Datastream / Pub/Sub / Dataflow for [Cloud Spanner](#). REST + [gRPC](#) API design, high-throughput data-plane patterns, [OpenTelemetry](#) observability. Deep Telecom + Open Banking experience — Bancnet (UAE [ADGM/DIFC](#) + Saudi [SAMA](#)), Globe 30K+ TPS Telecom engine, [Ericsson](#) and [AT&T](#) integrations. Led team of 4; mentored 40+; GCN 2022 speaker; GSoc mentor since 2019. Open to international relocation — Dubai/UAE, UK, Ireland, Netherlands, Germany, Switzerland, Norway, Sweden, Denmark, Finland, Canada, USA, Singapore, New Zealand.

ACHIEVEMENTS

- Speaker at [Google Cloud Next 2022](#) - "Migrating Monolith Applications into Microservices."
- [Google Summer of Code](#) — Contributor ([2017–2018](#)), [Mentor \(2019–2026\)](#); guided 10+ students on cloud-native and AI-native projects.
- Open-source maintainer — Genie (c2siorg), Bodh, gocloud, cx; reviewer for community PRs on multi-agent reference architectures.

OPEN SOURCE CONTRIBUTIONS

- [Gocloud](#): Developed a unified API library for managing cloud resources across AWS, GCP, and Azure.
- [CX Programming Language](#): Enhanced CX interpreter for deterministic blockchain transaction execution; implemented Pratt parser reducing parsing complexity by ~30%.
- [Google's Spanner Migration Tool](#): Redesigned schemas to prevent write hotspots; built CDC pipelines (Datastream, Pub/Sub, Dataflow) enabling minimal-downtime migrations to Cloud Spanner.

PERSONAL OPEN-SOURCE PROJECTS

[Genie](#) — Microsoft Foundry-Driven Multi-Agent Financial Assistant (Go, Azure AI Foundry, Microsoft MARA, Postgres, OpenTelemetry) · Author & Lead Engineer · Jun 2024 – Apr 2025

- 15 role-specialized agents (supervisor, analyzer, forecaster, anomaly_detector, recommender, llm_auditor, etc.) on Azure AI Foundry + Microsoft MARA; JWT + RBAC, AES-256-GCM envelope encryption, end-to-end OpenTelemetry tracing across agent hops.

[Bodh](#) — Microsoft-Powered [MAI-DxO](#)-Style Medical Diagnostic Agent Panel (Go, Microsoft MARA, [FHIR R4](#), [SD-Bench](#)) · Author & Lead Engineer · Jan 2024 – Oct 2024

- Virtual physician panel with role-specialized agents (intake, supervisor, questioner, test_planner, cost_guardian, diagnostician, reasoning_verifier); FHIR R4 + HL7 v2 aware; cost-aware diagnostic budget enforcement via dedicated Cost Guardian agent.

TECHNICAL SKILLS

Languages: Golang, Python, TypeScript, SQL

Cloud Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure

GenAI / ML: Agentic AI, Autonomous AI Workflows, Multi-Agent Systems, Multi-Agent Orchestration, LangGraph, LangChain, CrewAI, AutoGen, Google ADK, MARA, [Microsoft Agent Framework](#), Model Context Protocol (MCP), A2A (Agent-to-Agent), Function Calling, ReAct, Chain-of-Thought, Prompt Engineering, RAG Architecture, GraphRAG, Memory Management (Short/Long-Term), Agent Workflows, Vector Databases (pgvector, Pinecone, AlloyDB AI), Embeddings, Reranking, AI Evaluation (LLM-as-Judge), LangSmith, Guardrails, Model Routing, AI Governance, AI Integration Patterns, Enterprise-grade AI Solution Architecture, OpenAI, Anthropic Claude, [Gemini](#), [Vertex AI Agent Engine](#), [AWS Bedrock Agents](#), [Azure AI Foundry](#), Hugging Face, Ollama, MLOps, LLMops, DataRobot (familiar)

Databases: PostgreSQL, pgvector, Pinecone, MongoDB, Redis, Cloud Spanner, [BigQuery](#), Azure SQL, AlloyDB AI

APIs & Protocols: REST, gRPC, [GraphQL](#), API Gateway, UPI, Stripe

Frameworks & Tools: FastAPI, Django, Gin, Node.js, Docker, Kubernetes, OpenShift (familiar), GKE, EKS, Helm, Operators (custom controllers, CRDs), Terraform, Apache Kafka, Apache Airflow, Prometheus, Grafana, Google Cloud Run, AWS Lambda, Git, GitHub Actions, Jenkins, Linux

AI Dev Tools: Cursor, Claude Code, GitHub Copilot

Methodologies & Practices: Agile, Scrum, Test-Driven Development (TDD), Code Review, CI/CD, Site Reliability Engineering (SRE), Observability, Event-Driven Architecture, Microservices Architecture, Domain-Driven Design (DDD), CQRS, API-First Design

Security: Cloud IAM, Secret Manager, Cloud KMS, Cloud HSM, Cloud Armor, VPC Service Controls, Identity-Aware Proxy (IAP), Cloud DLP, Binary Authorization, Security Command Center, JWT, OAuth 2.0, OpenID Connect, Entra ID, RLS, Zero-Trust Architecture

PROFESSIONAL EXPERIENCE

Senior Software Engineer | [Searce Cosourcing Services Pvt Ltd](#) (Google Cloud Premier Partner)

Feb 2022 – Oct 2025

- Led the BigQuery FinOps engagement for [Tata Group](#) — query refactoring, MERGE redesign, and capacity-based slot reservation transition delivering a 57% data warehouse cost reduction.
- Architected the [Picnic](#) social platform backend serving 1M+ users — designed Go/gRPC microservices behind a GraphQL API gateway, reducing API response latency by 47% via protobuf contracts and service consolidation.
- Applied AI / AI-Native Engineering team — built Python/FastAPI services and multi-agent GenAI systems (Google ADK, MCP, MARA, Vertex AI Agent Engine): RAG pipelines, Gemini analyzers, conversational assistants.
- Built and led a team of 4 engineers; mentored 40+ developers across 4 internship cohorts; set architecture standards and drove technical decision-making across product lines.
- Led technical engagement for 15+ enterprise clients as the technical SPOC — reduced onboarding time by 35% and accelerated deployments by 30%; resolved P1 incidents affecting critical client workflows.

Selected Projects at Searce:

Litmus — GCP-Powered Industrial IoT Edge Data Platform (Python, Go, [MQTT](#), [OPC-UA](#), GKE, Pub/Sub, BigQuery) · Backend Engineer · May 2025 – Oct 2025

- GCP-powered backend integrations for Litmus Industrial IoT Edge Data Platform — real-time data ingestion from manufacturing and energy plants (MQTT, OPC-UA), Python streaming pipelines to BigQuery, Vertex AI-driven anomaly detection, and edge-to-cloud orchestration on GKE + Pub/Sub.

Bancnet — GCP Agent-Powered Open Banking Portal (Python, Go, Vertex AI Agent Engine, AlloyDB AI, FastAPI, RAG) · Lead Backend Engineer · Aug 2024 – Apr 2025

- GCP-agent-driven API-first Open Banking platform for UAE (ADGM/DIFC) and Saudi (SAMA) — Vertex AI Agent Engine for consent management, data residency, RAG semantic search on AlloyDB AI vector database (37% latency reduction).

Optimus — BigQuery Optimization (Python, Go, Gemini API) · Lead Engineer · Mar 2024 – Jul 2024

- Built a Gemini-powered analyzer that detects SQL anti-patterns (full scans, inefficient joins, missing partition filters) and recommends optimizations — delivered 57% BigQuery cost reduction via query refactoring, storage cleanup, and slot-based pricing adoption.

[Kinetic India](#) — Voice Assistant for Bike (Python, Go, Voice AI, ElevenLabs, Gemini) · Lead Engineer · Sep 2023 – Feb 2024

- Built a conversational voice assistant for Kinetic India two-wheeler riders — multi-language rider support for vehicle diagnostics, service booking, and ride telemetry queries; ElevenLabs voice synthesis with Gemini-backed dialog management.

Brownlow — [AFL](#) Voting Platform (Go, Python, GraphQL, gRPC) · Lead Backend Engineer · Mar 2023 – Aug 2023

- Zero-trust voting platform for AFL Brownlow Medal — 100K+ votes, 10K+ concurrent users on Cloud Run; validation, encryption (Cloud KMS), audit logging, abuse prevention via Security Command Center.

[DB Corp Ltd.](#) — GCP-Powered Digital News Platform (Go, Python, GCP, Vertex AI, BigQuery, Cloud Run, GKE) · Backend Lead · Sep 2022 – Feb 2023

- Backend for Dainik Bhaskar (India's largest Hindi newspaper) — Go multi-edition content APIs, Python/[Vertex AI](#) summarization pipelines, BigQuery ad-revenue analytics; Cloud Run + GKE.

[HarbourBridge](#) — Spanner Migration Tool (Go, Python, Cloud Spanner) · Core Contributor · Mar 2022 – Aug 2022

- Core contributor to Google's open-source Spanner migration tool — backend APIs for Intelligent Schema Assistant, CDC pipelines (Datastream/Pub/Sub/Dataflow), 40–60% post-migration query gains via PK design + indexing.

[Globe](#) — Telecom/FinTech Transaction Engine (Go, Python, Kafka, Kubernetes) · Architect & Tech Lead (10 engineers) · Apr 2022 – Sep 2022

- Architected a Kubernetes transaction platform (Go, Kafka, Pub/Sub, Redis) handling 30K+ TPS for Telecom/FinTech; led 10 engineers; idempotent processing, ledger/reconciliation, dual-layer auth (JWT + API Keys), PCI-aligned data protection, error-code orchestration with exponential backoff and DLQ fallback.

[Picnic](#) — Social Network (Go, Python, gRPC, Cloud Spanner) · Architect & Tech Lead (team of 4) · Feb 2022 – Jul 2022

- Led a remote-first team of 4 backend engineers — established 80%+ automated test coverage, built Prometheus observability (days → minutes detection), and lowered cloud infrastructure costs by 40%.

Specialist Application Developer | Net Connect Pvt Ltd

Jun 2021 – Feb 2022

Selected Project at Net Connect:

[azure-service-operator](#) — Kubernetes-Native Cloud Lifecycle for Ericsson & AT&T (Go, Python, Azure, Kubernetes) · Open Source Developer & Architect · Jun 2021 – Feb 2022

- Served as Open Source Developer and Architect for [airshipit](#) and [azure-service-operator](#) in collaboration with Ericsson, AT&T, and Microsoft.
- Integrated OpenTelemetry observability framework into the [airshipit](#) project, reducing manual operations by ~30% and improving incident detection and recovery time.

Software Developer | CloudCover Pvt Ltd (Google Cloud Premier Partner)

Oct 2019 – May 2020

Selected Project at CloudCover:

Bloom ([SC Ventures](#)) — Secure Cloud Provisioning for [Standard Chartered](#) (Terraform, AWS, Azure, SOC 2, ISO 27001) · Cloud Engineer · Oct 2019 – May 2020

- Contributed to Bloom (backed by [SC Ventures](#), Standard Chartered) — built Terraform-based, policy-driven secure cloud provisioning for regulated financial institutions on AWS/Azure with SOC 2 and ISO 27001 controls; developed push-to-deploy self-service capabilities, cutting onboarding time by 20%.
- Designed multi-cloud landing-zone patterns for regulated banking workloads; introduced policy-as-code guardrails (Open Policy Agent) and centralized audit logging.

Software Developer | SoftCorner

Feb 2016 – Dec 2017

Selected Project at SoftCorner:

[Shelter Associates](#) — Open-Source Data Platform for Slum Mapping (Python, [KoBoToolbox](#), Google Maps, [BIRT](#)) · Full-Stack Developer · Feb 2016 – Dec 2017

- Built an open-source data platform for [Shelter Associates](#) — integrated KoBoToolbox for survey data ingestion, built Python data pipelines, automated reporting via BIRT, and delivered spatial data visualization on Google Maps.
- Supported NGO-led slum mapping and rehousing programs across Pune, Sangli, and Kolhapur — delivered geospatial dashboards that informed municipal policy decisions and household-level housing interventions.

CERTIFICATIONS

- Coursera: Google Cloud — Generative AI Leader Professional Certificate.
- Udemy: AWS Certified Generative AI Developer – Professional.
- Ardan Labs: Ultimate Go and Ultimate Services Go.

EDUCATION

Bachelor of Engineering in Information Technology

2015

[Pune Institute of Computer Technology](#), University of Pune, India

LANGUAGES

English (Professional — full business fluency, written and spoken) · Hindi (Native) · Marathi (Native)

RELOCATION & AVAILABILITY

- Open to international relocation — Dubai/UAE, UK, Ireland, Netherlands, Germany, Switzerland, Norway, Sweden, Denmark, Finland, Canada, USA, Singapore, New Zealand. Passport valid through 2028, ready for work-visa sponsorship.
- Available to join within 30 days of offer — degree certificate & experience letters ready for MEA + UAE Embassy attestation.
- Direct UAE/Saudi regulatory experience via Bancnet (ADGM, DIFC, SAMA Open Banking).