Jigar Patel

Principal Engineer | Forward-Deployed AI, Infrastructure & Systems

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arclyx.ai | homenode.akash.network

SUMMARY

Principal engineer with 12 years as the customer-facing lead on every engagement, turning ambiguous business and technical requirements into production systems inside the client's environment: discovery, scoping, architecture, build, deployment, and operations. Currently building Arclyx, an AI agent platform for teams, after leading Akash Homenode from first commit to GA in 10 months. Co-founded Praetor, acquired by Akash Network in 2024.

SKILLS

Discovery & Architecture	Technical discovery and requirements scoping, solution architecture and system design, stakeholder alignment across engineering, product, and non-technical teams, technical direction for a 3–5 engineer team, production operations
AI / LLM	LLM application development; agent runtimes (tool-calling loops, sub-agents, token and wall-clock budgets); MCP connectors; evaluation harnesses; RAG (chunking, embeddings, vector search, reranking, grounded citations); multi-provider model routing; vLLM inference
Languages	Python, TypeScript, Go, Bash, SQL
Backend & web	FastAPI, Node.js, Postgres, Qdrant, React and Next.js, REST and streaming APIs, OAuth2 and DPoP
Infrastructure	Kubernetes (kubeadm, Helm, EKS, GKE), Docker, AWS, Linux systems (Ubuntu autoinstall, systemd, initramfs), GitHub Actions CI/CD, LUKS/TPM2, Secure Boot, Prometheus/Grafana

EXPERIENCE

Founder & Principal Engineer — Arc10 Technologies

Toronto, ON | Jul 2019 – Present

Hands-on principal engineer of a software consultancy. Set technical direction for a 3–5 engineer team across architecture, delivery sequencing, and production operations; the customer-facing lead on every engagement.

- **Client AI delivery:** Scope, build, and deploy RAG and document Q&A systems inside clients' environments, partnering with engineering, product, and non-technical stakeholders to turn ambiguous requirements into deployable systems; LLM-driven engineering automation (issue triage, code review, test generation).
- **Client product delivery:** Lead delivery from discovery to production across SaaS, marketplace, and logistics products; own the architecture and build the hardest slices hands-on.
- **Arclyx (2026 – present):** Core engineer on Arc10's AI agent platform for teams: describe a job and get a tested agent that runs on chat, schedules, webhooks, and Slack, answering from the company's own documents with citations (320+ merged PRs authored since Mar 2026). Live at arclyx.ai.
- **Agent platform:** Built the agent loop core (tool-calling loop, token and wall-clock budgets, sub-agent delegation, short-lived helpers), schedule and webhook triggers, the new-agent flow (describe, clarify, draft, test, create), and run observability with LLM-written run stories.
- **Model routing:** Built Auto mode, capability-based routing where an LLM decider picks the model for each request, with retry and failover across OpenRouter and AkashML.
- **Evaluation infrastructure:** Built the eval harness that gates agent changes: baselines that must be able to fail, a grader that cannot take down a batch, and repeated runs that classify flaky behaviour; rebuilt it in Oct 2026 with LLM-judge checks and a review queue, multi-turn scenarios, cost caps, and run-to-run comparison.
- **Security:** Added prompt-injection scanning of retrieved content and owner-only trace content; ran a platform security review and fixed its auth, credential, and permission findings.
- **Commerce & POS (2019 – 2024):** Owned architecture for STARR, a Shopify-embedded POS platform (Ontario Centres of Excellence project, hardware partner CPOS); shipped a food-ordering app to the App Store, later merged into CPOS.

Principal Engineer — Akash Network (Overclock Labs)

Remote | Jun 2024 – Present

Full-time contract engagement via Arc10. Core engineer on the provider side of Akash, the decentralized GPU cloud, following Akash's acquisition of Praetor (~1,640 commits and 260 merged PRs authored).

Akash Homenode — project lead Oct 2025 – present

- Designed and led the platform that converts consumer gaming PCs into Kubernetes-based GPU capacity through a guided installer and automated cluster provisioning, requiring no Kubernetes expertise from operators; first commit to GA in 10 months across scope, architecture, delivery sequencing, and the alpha, beta, public rollout.
- Ran the alpha pilot cohorts (RTX 4090 and 5090 owners) as the feedback loop that shaped the GA product, including the decision to support non-TPM2 hardware.
- Built installers for hardware we do not control: a hardened Linux installer, a Windows install path, GPU initialization, and automated cluster join.
- Designed the device trust model: installation key to ED25519 device identity to DPoP-signed requests, short-lived mesh and cluster-join credentials shredded after use, TPM2-bound full-disk encryption with recovery-key escrow, and Secure Boot signed images.
- Redesigned the device-unlock architecture after root-causing a fleet-wide silent TPM2-to-keyfile downgrade in production, preserving encryption guarantees while supporting non-TPM2 hardware; traced reboot-only failures to a systemd ordering cycle and removed a 90-second boot stall.
- Built the operator experience: a Go and Next.js kiosk appliance with signed apt OTA updates, web dashboard and admin, live install telemetry, and payouts; owned release engineering across five artifacts and the GA cutover.

Akash Console — Provider Console Jun 2024 – 2026

- Carried Praetor into Akash's official Console after the acquisition and owned the provider experience end to end (333 commits and 67 merged PRs authored): wallet-signature authentication, remote control-machine lifecycle, and upgrade tooling with live status checks.

Co-founder & Principal Engineer — Praetor (acquired by Akash Network)

Remote | Feb 2022 – May 2024

Co-founded and built Praetor from the ground up: the product that made becoming an Akash Network provider a guided process instead of a Kubernetes expertise problem. Acquired by Akash Network in 2024 and open-sourced under akash-network (Apache 2.0).

- Owned the product end to end with one co-founder: operator discovery, architecture, frontend and backend, release pipeline, and production support from alpha through acquisition.
- Automated what previously required a Kubernetes operator: remote master-node access, provider install, audit, and upgrades driven from a browser, reconciling on-chain state against the running cluster.
- Became the ecosystem's standard onboarding path; authored the provider management-API specification adopted in akash-network/community.

System Developer — MPAC (Municipal Property Assessment Corp.)

Pickering, ON | Jul 2017 – Jul 2019

- Lead architect for the company-wide frontend modernization and enterprise SSO across internal applications; owned reliability of the system holding 5M Ontario property records.

Earlier Roles — RC Design · The Computer Geek

2014 – 2017

- **Web Developer:** RC Design (2015 – 2017) and The Computer Geek (2014 – 2015): client web products and integrations.

EDUCATION

Bachelor of Engineering (B.E.), Information Technology — Gujarat Technological University

2008 – 2012

Ontario College Diploma, Computer Programming — Seneca Polytechnic

Toronto, ON | 2013 – 2014