

Ishan Parihar

AI Infrastructure Engineer · MCP Protocol · Multi-Agent Orchestration ·
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Noida, India github.com/ishan-parihar | linkedin.com/in/ishan-parihar |
ishanparihar.com STATS: 20+ | MCP servers · 1,300+ | tools deployed ·
30,000+ | tests shipped · 42 | repositories

PROFESSIONAL SUMMARY

AI infrastructure engineer building production systems for AI agents to operate at scale: 20+ MCP servers deploying 1,300+ tools across 42 repositories (some private, on request) in Rust, Python, and TypeScript. Multi-agent orchestration and first-principles architecture that bridge requirements with existing infrastructure — from data engineering and infrastructure management to tool delivery. Solo, AI-augmented delivery at 10x velocity, with every project shipping real test coverage: 30,000+ tests across the portfolio.

SKILLS & EXPERTISE

AI infrastructure engineering · infrastructure management · MCP protocol · multi-agent orchestration · Rust/Python/TypeScript as delivery stack · distributed systems · data engineering (411-source pipelines) · vector/FTS5 search · Postgres · Docker · tool schema design · test-first verification (30,000+ tests)

EXPERIENCE

Independent AI Infrastructure Engineer

Self-Employed | July 2023 – Present | Remote

- **operant** — Architected a local-first AI agent runtime — 19 Rust crates, 538.4K LOC, 9,249 tests, 68 MCP tools — production-grade private infrastructure with TDG-lite persistent memory, llama.cpp backend, MCP server + REPL + TUI. 100% local, zero telemetry: replaces hosted agent backends with a fully private, offline runtime — no data leaves the machine.
- **openscript** — Engineered an AI-directed video editing pipeline — 9 Rust crates, 74.6K LOC, 510 tests, 109 MCP tools. Markdown to narrated MP4 with AI voiceover, subtitles, B-roll, YouTube chapters — a text brief becomes a finished video without opening a video editor.
- **mysterium** — Designed and built a developmental assessment engine — 61.4K LOC, 1,090 tests, 64-cell module architecture, CLI + SvelteKit WebUI.
- **social-forge** — Built unified multi-platform social orchestration — 77.8K LOC, 257 tests, 328 MCP tools across 42 tool modules, triple interface (CLI, REST, MCP) — one codebase replaces per-platform tooling across the major social networks.
- **scorestrata** — Architected a music generation compiler — brief to mastered WAV. 12 Rust crates, 73.0K LOC, 944 verification tests, layered synth voices + SF2 instrument bank. Music as code: reproducible, versionable, verifiable audio.

- **tdg-rust** — Engineered a pure-Rust cognitive memory engine — 47.8K LOC, 626 tests, 50 MCP tools, holonic HRR algebra, FTS5 + vector search. Gives agents persistent, queryable memory across sessions instead of stateless context.
- **igs-rust** — Designed a high-performance intelligence-gathering MCP server — 27.7K LOC, 231 tests, 93 MCP tools, 411 sources across 20 domains and 47 countries, TOON output, static mustl binary. Zero API keys — every source costs nothing to query, with no subscription or vendor lock-in.
- **linkedin-lyr** — Shipped agent-native LinkedIn automation — 50.7K LOC, 1,166 tests, 25 tools, AXI-compliant TOON output, cookie-based auth.

Platform CLI Suite (-lyr tools) — 7 standalone CLI + MCP tools for social platform automation (facebook, instagram, reddit, twitter, threads, discord, telegram), each with AXI-compliant TOON output and agent session hooks — complementing the social-forge platform.

Business Development & Infrastructure Lead

Design Aesthetics | August 2019 – Present | Noida, India

- Ran digital operations for a 25-year architecture practice: web infrastructure, lead-gen automation, and social media presence
- Designed and automated CRM workflows, proposal pipelines, and content cadences that made client acquisition systematic
- Built the practice’s online channel into a predictable lead source, replacing manual outreach with repeatable systems

EDUCATION

B.A. Psychology (Honours) | IGNOU | 2025 – 2028 Exploring what differentiates humans from AI — an intentional choice to be a generalist that AI cannot replace.

B.Arch (Coursework) | Sharda University | 2016 – 2018 Systems thinking through architecture before pivoting to independent AI infrastructure.

PUBLISHED PACKAGES

instagram-lyr (PyPI) · linkedin-lyr (PyPI)