

SAGAR KHARAL

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Open Source

Hebbian Robotics (YC S26) — hflow | Aug 2026 – Present *Open Source Software Engineer · Remote*

- Merged 8 PRs in the first public week of hflow, an open-source Physical AI data platform (Python, MCAP, DuckDB, Parquet). Reference: Kingston Kuan, Co-founder.
- Fixed two silent data-corruption bugs: NumPy scalar measurements stored as NULL (episodes silently excluded from training manifests), and measurement keys shadowing episode columns (DuckDB silently renames; SELECT returns the wrong value). One discovered by auditing storage against curation queries, one reported by the co-founder. Both filed with runnable repros and merged same-day.
- Shipped a LeRobot-to-MCAP converter passing strict format conformance checks, and a reproducible synthetic stress framework adopted as the repo's benchmarking standard (byte-identical episode files across runs).

Experience

XpertStim IT Services Pvt. Ltd. | May 2025 – Jul 2025 *Web Developer Intern · Remote*

- Sole frontend developer on a tours and travel product; shipped 8+ UI sections from scratch (hero, itinerary cards, booking flow) using React.js and Tailwind CSS.
- Built a reusable component library with Framer Motion animations; delivered pixel-perfect responsive layouts across mobile, tablet, and desktop viewports.

Projects

Repatch — Autonomous Bug-Fixing Agent | 2026 *TypeScript, Node.js, Python, Docker*

- CLI agent that takes a GitHub issue, explores the codebase, reproduces the bug, writes the failing test, verifies the fix in a Docker sandbox, and opens the PR.
- 7-step state-machine orchestrator with backtracking on failure and checkpoint persistence; multi-provider LLM inference with structured tool-calling.

vela-cascade-eval — Deterministic Agent Eval Harness | 2026 *TypeScript, Vitest*

- Eval harness for scheduling agents under concurrent booking cascades: 500 seeded scenarios, byte-identical replay verification, 10 machine-checkable invariants.

Nexa AI — AI Trip Planner | 2025 *Next.js, Gemini API, Tailwind CSS*

- Generates personalized day-wise itineraries from user preferences; deployed live in production on Vercel.

Hybrid Resume-Screening Model — Major Project, Team Lead | 2024 – 2025

Sentence-BERT, Phi-3.5, Python

- Led a 4-member team; SBERT semantic similarity scoring combined with Phi-3.5 evaluation across skill relevance, project depth, and communication clarity on 8,000 resume-JD pairs.

Education

JIMS Engineering Management & Technical Campus, Greater Noida | Aug 2022 – May 2026 *B.Tech, Computer Science Engineering — GPA: 8.4/10*

Technical Skills

Languages: JavaScript, TypeScript, Python, Java, SQL, HTML/CSS **Frontend:** React.js, Next.js, Tailwind CSS, Framer Motion **Backend & Data:** Node.js, Express.js, MongoDB, PostgreSQL, DuckDB, REST APIs, JWT **AI & Tools:** LLM tool-calling, coding agents (Claude Code, Codex), Docker, Git/GitHub, pytest, Vitest