Sayan Sarkar

Generalist Full Stack & AI Engineer

Berlin, Germany
hi@shayon.work
+49 151 5604 7553
shayon.work · github.com/dit7ya

I thrive at high-agency companies and ship products from zero to one. I work across the stack and love solving hard technical problems.

Experience

Mar – Oct 2026

shhh.date

Co-founder & CTO

- Co-founded and launched a platform giving independent sex workers control over booking management, messaging, safety, and client vetting.
- Single-handedly built the entire application from scratch, including infrastructure, DevOps, and automated CI/CD with GitHub Actions.
- Owned user interviews, product planning, roadmapping, and delivery.
- Onboarded 5–6 independent workers to the live product and used their feedback and user testing to guide product development.

SvelteKit, TypeScript, Cloudflare Workers, Neon Postgres, Better Auth, Cloudflare R2, GitHub Actions

Nov 2025 – Feb 2026

United Manufacturing Hub

Senior Software Engineer

- Built full-stack features for a distributed manufacturing data platform operating across complex network topologies and corporate firewalls; contributed to resilient transport and synchronization layers.
- Worked directly with customers and drove UX for a management console, turning dense operational data into usable interfaces.

Go, TypeScript, Svelte

Oct 2022 – Oct 2025

Tenzir

Senior Software Engineer · Founding Frontend Engineer

- Architected the entire frontend and single-handedly shipped the frontend and platform in eight months, before LLM coding tools. Served 12+ B2B customers, then hired three frontend engineers and a designer and scaled the team.
- Helped design the architecture and built the Python API and WebSocket transport layer for durable data delivery across product versions and corporate firewalls, including customer deployments of around 100 nodes.
- Enabled customers to query and explore cybersecurity data across their nodes in one interface, with interactive charts, dynamic-schema tables handling thousands of rows, and a DSL editor with syntax highlighting, autocomplete, and inline docs.
- Cut time to first displayed data from over 12 seconds to around 2 seconds.
- Built live dashboards and pipeline management with execution controls, metrics, history inspection, and queries across customer-selected nodes.
- Replaced a customer's in-house visualization tool, developed over two years, with a native product solution; generalized it to support other customers' use cases.
- Built five customer POCs, all adopted for customer use and incorporated into the product roadmap; delivered some in two weeks. Shaped solutions through customer workshops and collaboration with design and product.
- Built language tooling and wrote technical docs, tutorials, and release announcements.

SvelteKit, TypeScript, Effect-TS, Tailwind CSS, Python, FastAPI, WebSockets, Vercel, AWS

Jan – Jul 2022
Colony.io
Software Engineer

Built an open-source platform for creating DAOs with on-chain governance.

React, TypeScript, GraphQL, Ethers.js, Ethereum smart contracts

Selected Projects & Open Source

2020 – 2026
NixOS / nixpkgs
Open-source maintainer & contributor

I maintain approximately 100 packages in nixpkgs, handle complex packaging work, and review pull requests across the Nix and NixOS ecosystem.

Summer 2026
Interactive Festival Badge

A wearable ESP32 hardware project with a digital garden that grows throughout the festival: each new encounter plants a tree. An interactive question flow generates personalized poems and artwork. The system tolerates network failures.

ESP32, TypeScript, SvelteKit

2026
Whistleboard

Private speech-to-text for low-power devices, including an Android voice-typing keyboard. Modular client–server architecture with swappable models and backends: run inference on-device or on your own server, with both ends under your control.

Research & Publications

2025
Research Proposal Contest — Winner
Zurich AI Safety Day · Sponsored by Anthropic

Proposed investigating whether hierarchical reasoning models generalize value learning under adversarial attack more robustly than large language models.

2019
Categorizing Wireheading in Partially Embedded Agents
Majha, Sarkar, Zagami · IJCAI-19 Workshop on AI Safety

2018
irl-benchmark

Co-authored a modular library for evaluating inverse reinforcement learning algorithms across environments and metrics at AI Safety Camp, Prague.

Education

Winter 2021
Recurse Center
Programming Retreat

Self-directed programming residency; built open-source browser extensions and Emacs packages and explored programming languages and full-stack architectures.

2014 – 2019
IISER Pune
BS–MS Dual Degree · Mathematics

Thesis: *Frontiers in Inverse Reinforcement Learning*. Supervisor: Dr. Tomas Gavenciak, Charles University, Prague.
GRE: **169 Quantitative · 163 Verbal** (332 total).

Technical Skills

Languages	TypeScript, JavaScript, Python, Go, Nix
Frontend	Svelte, SvelteKit, React, Tailwind CSS, Effect-TS, Next.js
Backend & Infra	Node.js, FastAPI, PostgreSQL, GraphQL, WebSockets, Docker, Terraform, AWS, Vercel, Cloudflare, serverless, GitHub Actions, Linux, NixOS
AI Tooling	Claude Code, OpenCode, pi, agent harnesses
AI / ML	LLM application development, harnesses, RAG, model integration, PyTorch, TensorFlow, reinforcement learning