

Shlok Parida

Senior Software Engineer — Open Source Contributor. Go | Zig | PSQL | K8s

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Engineer. I spend most of my time on the unglamorous parts of a system: database automation, integrations to external services, networking and proxies, scheduled work that has to be correct at three in the morning, and the instrumentation that tells you when it is not. Mostly Go and Postgres.

OVERVIEW

Go	Primary language since 2019. HTTP services and background workers, proxy and relay daemons, embedded work in TinyGo, and command-line programs that run unattended on a schedule. Standard library first.
Ruby and Rails	Day-to-day work in a large Rails codebase: ActiveRecord queries and migrations, background jobs on Sidekiq, and process-level measurement of Puma web and worker containers.
PostgreSQL	Query planning and index strategy, raw SQL as readily as an ORM, partitioning and archival of cold data, logical replication, pooling through PgBouncer, and daily capacity reporting. Also pgvector for hybrid retrieval, and SQLite where one file is the right answer.
Docker and containers	Multi-stage builds down to a distroless static image, Kubernetes service routing and ingress, memory-limit diagnosis on containerised processes, and development environments that match what ships.
Cloud	AWS S3 and object storage at cross-datacentre replication scale; Render, Heroku, DigitalOcean and Oracle Cloud for everything smaller. Moving live workloads between providers without downtime.
Infrastructure	Scheduled-job fleets managed as infrastructure-as-code, Terraform, CI on GitHub Actions, mesh networking over Tailscale, and observability through Datadog, Prometheus and OpenTelemetry — so a failure is attributable rather than merely visible.
Also	Zig, C and Zephyr for keyboard and sensor firmware, JavaScript and TypeScript with Next.js, Python and Django, Redis, and a headless hardware toolchain of KiCad, ergogen and OpenSCAD.

EXPERIENCE

XBE · Software Engineer Mar 2026 – Present

Core infrastructure: Postgres, scheduled workloads, archival and production observability.

- Query and index work on a large Postgres estate: finding why the planner was not using an index and fixing it in the query rather than by adding another, and auditing usage across primary and replica before anything was dropped.
- Designed and built a forward proxy in Go over a private mesh network — TCP and UDP relay, SOCKS5 and HTTP CONNECT — replacing per-container VPN daemons and command wrappers.
- Migrated a large fleet of scheduled jobs between hosting platforms as generated infrastructure-as-code, in waves, re-sizing after diagnosing memory limits on the first.
- Built and operated an archival pipeline moving cold partitions off an OLTP primary into columnar files on object storage, then hardened it so a stalled worker failed loudly and archival could not take an exclusive lock on a live table.
- Instrumented web and worker processes so container memory kills became attributable, and put database capacity on a daily report: disk runway, invalid indexes, unused candidates.

Trantor · Senior Software Engineer Feb 2024 – Dec 2024

Mumbai, Maharashtra, India

- Integrated a WYSIWYG editor into the platform over an event-driven system.
- Optimization of the platform and its containers to achieve both an audit trail of changes and security through RBAC.

Siemens Technology and Services · Cloud Engineer Dec 2022 – Jun 2023

Pune, Maharashtra, India

- IoT work bridging the analog interfaces of sensors to a cloud interface for control and monitoring, using Go, TinyGo and Node.

Seagate Technology · Engineer II, LyveCloud Mar 2021 – Dec 2022

Pune, Maharashtra, India

- LyveCloud engineering. Converted from contractor to FTE from Velotio.
- Worked with the AWS S3 CLI and Go integration.
- Load balancers and proxy mappings in Kubernetes, and large-scale replication across data centers.

- After closure of the COVID India task force, the project was picked up by me and a few other members and taken to completion.

PROJECTS**go-zmk** · Flashing and configuration toolkit for ZMK keyboards

2026

Go · 45 files · 121 tests

- Validates a firmware image's family ID before writing a single byte, because a bootloader silently ignores blocks it does not recognise — so a copy onto the wrong board reports success and does nothing.
- Treats the device disappearing from sysfs as the only trustworthy completion signal: the board reboots the moment the last block lands, which means an I/O error near the tail is the shape of success and the copy's exit status is never the answer.
- Ships a scriptable fake-bootloader simulator so each hardware failure mode is a named test. Verified against the simulator; hardware verification still outstanding.

cta-mem · Agent memory system on Postgres and pgvector

2026

Go · pgx · pgvector · in daily use since April

- Hybrid retrieval over roughly a thousand documents: a GIN tsvector arm and an HNSW cosine arm fused by reciprocal rank, rather than choosing one and inheriting its blind spot.
- Splits long transcripts on turn boundaries sized to the embedding model's input limit while keeping the full text in Postgres, with a parent record that summarises the parts and links them.
- Pluggable embedding providers, falling back from a hosted model to a local one without changing the stored dimensionality.

manga-dl · Scraper to CBZ archives, running unattended

2026

Go · nightly cron · 30 GB archived

- Resolves chapter identity from the page title rather than the URL slug, because duplicate-post slugs routinely disagree with the chapter they claim to be.
- Re-checks last-modified dates and compares a hash of the image list, because chapters are published as one-image placeholders and filled in days later, which a manifest-only sync skips forever.

KPTM · Interactive comic and private two-person hub

2026

Next.js · Postgres · object storage · Render

- Moved the database between providers with no downtime by leaving updatable views at the old names through cutover, so old and new code paths both kept working.
- Root-caused a production outage against the reported symptom — a paused database tier rather than object storage — by noticing which routes still returned 200, and found a second latent bug hiding behind the first.

zmk-config · Corne split keyboard firmware and OLED art

2026

C · Zephyr · devicetree · in daily use

- Sprites are pre-rotated at generation time into one-bit bitmaps, because the panels mount ninety degrees off and rotating at runtime on the keyboard is not worth the cycles.
- Keypress readout writes one volatile counter for the display library's existing timer to read, which keeps the render loop single-threaded.

OPEN SOURCE**JCoupalK/go-pgdump** · Contributor

2024

Go library for PostgreSQL dumps with no external dependencies

- Four merged pull requests: schema and table prefix/suffix selection, parallel read and write with bounded concurrency, and CSV export.