

# Cherniavsky Kirill

SOFTWARE ENGINEER · GO · HIGHLOAD · DISTRIBUTED SYSTEMS

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## Summary

Go backend engineer (12+ years) focused on high-load distributed systems and microservice architecture. Built low-latency, event-driven services, designed reliable messaging/data pipelines, and operated production systems in Kubernetes. Led teams (up to 5 engineers). Active open-source contributor and conference speaker.

## Skills

Go, distributed systems, microservices, gRPC/REST, event-driven architectures, TCP protocols, performance/latency tuning, PostgreSQL, Kafka, RabbitMQ, Redis, ClickHouse, Kubernetes, Helm, Prometheus, Grafana.

## Work Experience

### Softswiss

Remote

SENIOR SOFTWARE ENGINEER (Go)

Jan. 2024 - Now

- Built event-driven Go microservices; handled **100k+ events/min peak** via **Kafka**; maintained reliable processing and observability.
- Designed and implemented an end-to-end user-facing pipeline with **p95 SLA 3 seconds**: event ingestion → multiple microservices → browser delivery via **WebSockets**.
- Operated multi-tenant **Kubernetes** platform: **6 production clusters**, hundreds of client namespaces, up to **~100 pods/client**; **Helm**, scaling, monitoring with **Prometheus/Grafana**.
- Worked with **PostgreSQL** at scale: partitioned tables with multi-million rows and replication enabled; contributed to schema/query design and operational stability.

### Quantum Brains

Remote

SENIOR ENGINEER / TECHNICAL LEAD

Mar. 2022 - Sep. 2023

- Built latency-sensitive Go services with **~10ms target budget**; observed **p95 ~100ms** and **p99 ~200ms** in production; worked on tail-latency reduction and operational reliability.
- Developed real-time event processing components and APIs; integrated services via **TCP, REST**, and **Kafka**.
- Built analytics ingestion into **ClickHouse** and maintained supporting infrastructure.

### HUBUC

Barcelona, Spain

BACK-END SENIOR ENGINEER (REMOTE CONTRACTOR)

Jun. 2022 - Jun. 2023

- Built Go services for a Mastercard issuer processor (authorization, reversals, refunds) under a strict external constraint: **must respond within 3 seconds** or transactions fail.
- Developed microservices interconnected via **RabbitMQ**; implemented reliability patterns: **DLQ**, retries, and request/response (*reply-to*) messaging.
- Implemented **TCP** endpoint services for a custom protocol with strict response-time limits; improved reliability under time constraints.
- Built **REST** and **gRPC** APIs for transaction data access; designed **PostgreSQL** schemas and queries for balances/amount calculations.

### Huawei R&D Laboratory / Huawei Cloud Department

Moscow, Russia

PRINCIPAL ENGINEER, TEAM LEAD

Jan. 2020 - Feb. 2022

- Led two projects simultaneously (teams of 5 and 3 engineers); coordinated requirements with HQ and drove architecture decisions.
- CloudArtifact: Owned high-throughput components of a cloud artifact repository (100M+ artifacts), supporting **300k+ downloads/min peak**.
- Git repository replication: Designed a **strongly-consistent** replication system across **5 regions** with **5-second replication lag target**; implemented a **Paxos commit** workflow and delivered a Go-based solution integrated into a cloud service at multi-million repository scale (**15k pulls/min peak**).

### Freelance

Remote

SELF-EMPLOYED

Jan. 2018 - Dec. 2020

- Built a Go high-load advertisement tracker backend (**2M requests/min**).
- Tech lead for a Go microservices project (team of 5 across time zones); drove architecture and delivery.
- Delivered Java services and data processing components for a US healthcare startup.

### Eventicios LLC

Samara, Russia

SENIOR DEVELOPER

Jan. 2015 - Dec. 2017

Senior Developer (Android/iOS, Xamarin/Java)

### Mercury Development LLC

Samara, Russia

DEVELOPER

Jan. 2013 - Jan. 2015

Developer (Android/Java)

## Honors & Awards

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### HUAWEI

- |      |  |                       |
|------|--|-----------------------|
| 2020 | <b>Best Support Award</b> , Awarded for exceptional support to the HQ team in integrating our R&D solution into Huawei Cloud services. | <i>Moscow, Russia</i> |
| 2021 | <b>Best Quality Award</b> , Received for delivering outstanding product quality in contributions to Huawei Cloud.                      | <i>Moscow, Russia</i> |

## Presentation

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### GopherCon Singapore 2023

*Singapore*

SPEAKER WITH “GO LOW LATENCY PATTERNS” TALK AT GOPHERCON  
memory + GC analysis tools and latency-focused coding patterns.

*Nov. 2023*

### Google dev fest

*Armenia*

SPEAKER WITH “GO BEYOND MODELS: WHY AI NEEDS A FAST BACKEND” TALK  
Go backends, backpressure, tail latency, p95

*Dec. 2025*

## Open source contributions

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### [github.com/g4s8/envdoc](https://github.com/g4s8/envdoc)

*Go tool*

AUTHOR

*Since 2022*

generates Markdown/HTML/plaintext docs from env var annotations; listed in *avelino/awesome-go*; referenced in *caarlos0/env* repo.

### [github.com/void-linux](https://github.com/void-linux)

*Void Linux*

CONTRIBUTOR

*Since 2021*

regularly maintaining and updating packages.

### [github.com/golang/go](https://github.com/golang/go)

*The Go programming language*

CONTRIBUTOR

*Since 2022*

contributed fixes and documentation improvements.

## Writing

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### Blog posts about Go at [g4s8.wtf](https://g4s8.wtf)

*Personal website*

AUTHOR

*Jan. 2020 - PRESENT*

- Go low latency patterns — interfaces, generics and inlines
- Go low latency patterns — pointers
- The performance of Go error handling
- A few notes on cache lines in Go

### Posts at [medium.com](https://medium.com)

*Medium*

AUTHOR

*Jan. 2023 - PRESENT*

- Keeping Your Go Environment Variable Documentation Effortlessly Up-to-Date

## Education

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### BMSTU

*Moscow, Russia*

MASTER, ENGINEER

*Sep. 2008 - Aug. 2014*

- aerodynamics