

Lead Backend Developer

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Portfolio: nitinkalma.dev

Professional Objective:

Backend systems engineer with 5+ years building high-throughput media infrastructure and distributed services. Founded the engineering backbone of a CCTV/VMS platform (RDX) from zero to production, leading a team of 10 across three mission-critical products. Deep expertise in Go and Python; actively engineering in Rust — currently building an open-source P2P camera streaming SDK targeting India's post-ban CCTV market. Interested in systems roles at companies pushing the frontier of distributed infrastructure and networking.

Technical Skills:

Category	Technologies
Languages	Golang (Expert), Python (Expert), Rust (Intermediate)
Media & Streaming	go2rtc, MediaMTX, ZLMediaKit, RTSP, WebRTC, ONVIF Protocol
Backend & Architecture	Microservices, RESTful APIs, Software Design Patterns, System Design
Tools & Databases	Docker, Git, MongoDB, Redis, Linux Systems, Kubernetes
Leadership	Team Management (10+ devs), Technical Planning, Project Roadmap Design

Work Experience:

Lead Backend Developer | Ease My AI Pvt. Ltd. (Sept 2020 – Present)

Key Contributions & Leadership:

- **Architected the RDX (RedX) Platform:** Engineered the core Video Management System (VMS) for CCTV recording and processing. Integrated specialized media servers including **go2rtc**, **MediaMTX**, and **ZLMediaKit** to handle high-concurrency video streams.
- **Team Leadership:** Currently directing a team of **10 developers** across 3 mission-critical projects, overseeing software design decisions, code reviews, and architectural planning.
- **Open Source & Protocol Optimization:** Forked and maintained the `use-go/onvif` library to resolve critical bugs and enhance compatibility, enabling seamless device discovery and management for the RDX platform.
- **Founding Engineering:** Joined as one of the first two backend developers; built the foundational backend infrastructure that allowed the company to scale from a startup to a recognized AI solutions provider (Diycam/EaseMyAI).
- **Cross-Functional Development:** Pioneered the use of **Golang** within the organization alongside Python to optimize performance-heavy services and microservices

Jr. Web Developer / Python Developer | Matchpointgps Pvt. Ltd (Dec 2019 – 25 Mar 2020)

Key Contributions:

- Writing python Scripts to collect data from multiple databases and gather data for analytics.
- Develop Backend of Inhouse project Dealers dashboard and Make APIs for that.
- Develop Backend of Inhouse project Accounts dashboard and Make APIs for that.
- Preparing Project Schema Based on Business Requirements.
- Debugging Existing MIS application and Making Changes in APIs as per developer's requirements.

Python Developer / Web Developer | Freelancer. (jan 2018 – dec 2019)

Key Contributions:

- Getting Clients Project requirements and understanding project according their requirements.
- Writing python scripts to scrape data from websites using selenium and BeautifulSoup.
- Writing python scripts for college projects.
- Django Blog (www.gappagosthientertainment.com)
- Writing Telegram Client to get clients details.

System Administrator | VNS Finance and Capital Services. (Jun-2017 - Dec-2017)

Key Contributions:

- Managing IT Assets and User Details in office.
- Co-ordinating with Exchanges to solve Trading APP related issues.
- Managing servers for Proper BOD on windows and Linux servers.
- Monitoring Live servers and Networks using Monitoring tools.

Project Co-ordinator | Reliance Jio Infocomm LTD (Dec 2016 – Jun-2017)

Key Contributions:

- Day to day specific reports preparation/validation of I&C DPR, logistics transactions update, RS&R reports (DOA/Operational RMA failures), fiber cut/high losses reports etc.

Notable Projects

Systems Programming Learning Repo github.com/kalmastenitin/kv

Rust · TCP · epoll · atomics | github.com/kalmastenitin/kv

- TCP key-value server, epoll-based server via mio, lock-free data structures with atomics; part of a structured Rust learning roadmap towards systems/infra roles.

RTSP ingest + RTP depacketizer for the VMS stack github.com/kalmastenitin/camproto-ingest

Rust · TCP · TOKIO | github.com/kalmastenitin/camproto-ingest

- RTSP ingest layer pulls h264/h265 streams from RTSP cameras and emit mediaframe structs via tokio broadcast channel.
- parses codec from sdp for codec identification. Passing of stream for camproto-store.

Portfolio - P2P Portfolio & Live Camera Demo

Rust · Go · Svelte 5 · WebRTC | nitinkalma.dev

- Built a full-stack portfolio site featuring a live P2P camera streaming demo — phone streams to desktop over WebRTC with no media server
- Wrote a Rust/axum WebSocket signaling server with tokio mpsc channel relay, HMAC-SHA1 TURN credential generation, and QR-based session pairing
- Deployed on Netcup VPS with nginx reverse proxy, Let's Encrypt TLS, coturn STUN/TURN, and Upstash Redis; Go/Gin REST API serves portfolio data
- Debugged full WebRTC ICE negotiation stack — SDP offer/answer, trickle ICE, TURN relay, hairpin NAT, and cross-network connectivity from 4G mobile to WiFi desktop

EDUCATION:

- B.E (E&TC Engineering)-2016 University of Pune
- HSC Maharashtra board - 2012
- SSC Maharashtra board - 2010