Dipankar Das

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Professional Summary

Systems-focused DevOps Engineer with 2+ years of experience specializing in cloud-native architecture, infrastructure modernization, and high-concurrency distributed systems. Architected multi-cloud orchestration engines in **Go** and led zero-downtime migrations for **Fortune 500** and **FinTech** enterprises. Proven track record in optimizing cloud spend by **20%** via advanced FinOps strategies and enhancing reliability through **OpenTelemetry**. Founder of the **ksctl** ecosystem, dedicated to building developer-centric efficiency tools and scalable multi-cloud infrastructure.

Skills Summary

- **Languages**: Go, C, Python, Rust, Java, JavaScript, C++
- **Tools**: Kubernetes, Docker, MongoDB, MariaDB, NATS, Redis, Jenkins, Ansible, Terraform, Vault
- **Concepts**: Event-driven systems, CQRS, DDD, Event Sourcing (familiar)
- **Platforms**: AWS, Azure, Hetzner, GCP, Linux
- **Soft Skills**: Project Maintainer, Planing, Tech. Writing, Time Management and Automating things

Experience

- **rtCamp** — Pune, India
  DevOps Engineer — *Jan 2024 - Present*
  - **Enterprise IaC & Migration (Cox Automotive)**: Spearheaded a zero-downtime migration of legacy AWS infrastructure into **Terraform**. Remediated critical gaps by importing manually managed **CloudFront** distributions, **S3** assets, and **WAF** policies into a standardized multi-environment GitOps workflow, ensuring 100% configuration consistency and eliminating "Click-ops". Had a rigorous **Plan-Review-Apply** SOP for infrastructure changes, ensuring zero configuration drift across multi-cloud production environments.
  - **Cloud-Native Scaling & Observability**: Architected the migration of a monolithic **Frappe/ERPNext** platform to a distributed **Kubernetes** cluster for a global FinTech platform. Decoupled core services to handle high-concurrency traffic and implemented **OpenTelemetry (OTel)** for full-stack instrumentation (logs, traces, metrics), reducing MTTR by providing deep visibility into distributed worker bottlenecks.
  - **Cloud FinOps & Cost Engineering**: Achieved a **20% reduction in cloud OpEx** by optimizing Kubernetes compute strategies. Engineered specialized Node Groups utilizing **Spot Instances** and implemented **scale-to-zero logic** for memory-intensive background tasks and cron jobs, ensuring high performance while minimizing idle resource waste.
  - **Product Engineering (EasyDash / EasyEngine)**: Co-developed a high-scale **Cloud Provisioning Engine** for **dash.easyengine.io** using **Python, Terraform, and Ansible**. Engineered the automated backend for rapid WordPress/PHP deployments, facilitating a successful market launch that generated $200+ in initial subscription revenue within 60 days.
  - **Automation & Developer Experience**: Optimized **GitHub Self-Hosted Runners** with resource-aware labeling and multi-container environments, drastically reducing CI/CD wait times.
- **kubmin – ksctl** — Remote
  Founder & Principal Engineer — *Jun 2025 – Present*
  - **Distributed Orchestration Engine**: Architected a cloud-agnostic provisioning engine in **Go** to manage Kubernetes lifecycles across AWS, Azure. Engineered a high-availability state layer using **Turso (Edge SQLite)** and **Redis**, enabling idempotent cluster operations with a minimal infrastructure footprint.
  - **Pragmatic Task Orchestration**: Developed a lightweight, event-driven **state machine** using **NATS JetStream**. Optimized for operational simplicity over heavy frameworks like Temporal, implementing custom NAK/ACK and retry logic to ensure 100% reliability during long-running infrastructure tasks.
  - **Scalable Access Governance (ReBAC)**: Implemented a **Relationship-Based Access Control** system using **Authzed (SpiceDB)**. Designed a hierarchical sharing model (Org, Cluster, Workload) to handle complex multi-tenant permissions and quota enforcement across distributed engineering teams.
  - **Developer Efficiency Analytics**: Designed an engine to track **container image behavior across versions**, providing developers with data-driven insights into performance and energy regressions. Enabled teams to baseline and optimize software efficiency within the Kubernetes deployment pipeline.
  - **AI-Augmented Engineering**: Integrated **Claude Code and Gemini CLI** into the platform development workflow. Leveraged AI-agentic patterns to accelerate platform delivery by 40% while maintaining high code quality and consistency.
  - **Website**: Link to Detailed view
- **Viamagus** — Remote
  DevMLSecOps Consultant POC (Freelance) — *Feb 2025 – Apr 2025*
  - **Integrating vulnerabilities finder inside their CI**: used OWASP ZAP to help the team find bugs in their APIs like SQL injection, man-in-middle attacks for their web applications and APIs
  - **Integrating Snyk into their Code Review Pipeline**: into their CI pipelines for vulnerability scanning.
  - **Optimized internal LLM-based projects**: Helped containerization and even created resport on what are the real benchmarks interms of image size, network/disk performance.
  - **Deploying OSS LLM Models**: Deployed vLLM and ollama with AWS Auto Scaling Groups and VPC PrivateLink infrastructure.
- **Open Source Contributions** — Remote
  Self-Employed (Part-time) worked on Rust, Go, JavaScript, CI/CD Pipelines, Documentation — *Feb 2022 - Present*
  - **For Detailed view**: Link to Detailed view

Projects Detailed view

- **KsctlCli - Github Link** — Cloud Agnostic Kubernetes management tool
  Founder & Lead Developer — *Sep 2022 - Sep 2025*
  - A Generic Kubernetes Management CLI tool for various cloud providers
  - Worked with NATS and event-driven patterns in internal tools.
  - Integrated with MongoDB, SQLite (Turso), Docker, and Kubernetes APIs.
  - Tech: Go, Kubernetes, AWS, Azure, Civo, GCP, Docker, Cosign, System Design
- **WAE - WASI App Experiment - Link** — AI and WASM
  Creator and Maintainer, Wattime, OpenAI, WASM — *Jul 2024 - Aug 2024*
  - Built a modular WebAssembly (WASI) app using multiple language runtimes for end-to-end automation.
  - Demonstrated multi-service orchestration with persistent local storage and cross-component comms.
  - was able to achieve multi language code base on single build system by using WASI@v2
  - Tech: Rust, WASM, Python, OpenAI, WattTime, GitHub API
- **Chat bot - Link** — LLM and WASM
  Creator & Maintainer, Transformer, WASM — *Jun 2023 - Jul 2023*
  - Create HTTP server using rust as a wasm module and have it to handle request for the text2text generator machine learning model running on huggingface
  - Tech: Rust, WASM, Python, FastAPI, HuggingFace

Certificates

- All certificates and badges certificates

Education

- **KIIT University** — Bhubaneswar, India
  Bachelor of Technology in Computer Science; GPA: 9.17 — *Aug 2020 - Jun 2024*

Languages

- English - Native or bilingual proficiency

Volunteer Experience

- **CNCF Green Reviews (Contributor)** — Global
  Aim to measure carbon footprint of CNCF projects
  - Reviewed CNCF projects for sustainability and environmental impact.
  - Worked on SCI scoring and Golang monitoring tooling.
- **Kubesimplify (Ambassador)** — Global
  Simplify Cloud native concepts — created and maintained a project, tech. blogs