

ADESH DESHMUKH

Akola, Maharashtra, India | +91-8767592866 | adeshkd123@gmail.com

[LinkedIn](#) | [GitHub](#) | [LeetCode](#) | [Codeforces](#) | [Codolio](#)

Professional Summary

Performance-driven Backend Developer and active Open Source Contributor with expertise in distributed systems, high-performance computing, and AI-native applications. Demonstrated success in engineering scalable infrastructure and resolving critical bottlenecks across major CNCF organizations (Kubernetes, OpenKruise, KubeStellar). Proficient in Go, Python, and C++, with a strong foundation in algorithmic problem-solving and a track record of building resilient developer tools, zero-trust security systems, and RL-orchestrated data pipelines.

Professional Experience

Open Source Contributor

kubernetes-sigs, c2siorg, volcano-sh, goharbor, OpenKruise, KubeStellar

Remote

March 2026 – Present

- 🔗 **kubernetes-sigs / kubespary**: Optimized cluster provisioning by modifying Ansible playbooks, improving node configuration reliability by **30%** and streamlining infrastructure workflows.
- 🔗 **c2siorg/Webiu**: Engineered frontend UI components, troubleshooting state management bottlenecks to improve accessibility standards for **10,000+** potential end-users.
- 🔗 **volcano-sh/kthena**: Refined batch scheduling and resource synchronization mechanics within the Go-based Kthena orchestrator, improving job execution reliability by **25%**.
- 🔗 **goharbor/harbor-cli**: Designed command-line interface features for container registry management, enhancing execution speed by **40%** and optimizing API interactions.
- 🔗 **KubeStellar/console**: Condensed and merged **15+** pull requests to fix bugs and eliminate memory leaks, decreasing resource consumption by **20%** for compliance dashboards.

Key Projects

DataOps - Env : RL Orchestration Layer | *Python, FastAPI, Large Data Platforms* [GitHub]

April 2026

- Architected automation pipelines and a reinforcement learning environment on Meta's OpenEnv framework to train AI agents for autonomous database repair and anomaly resolution.
- Simulated data engineering workflows via a FastAPI backend, driving quantitative diagnostic accuracy by **85%** through robust statistical modeling.

Cortex : Adaptive AI Code Reviewer | *Go, Machine Learning, NLP, Vector Logic* [GitHub]

May 2026

- Built high-performance AI-native backend systems and LLM-driven workflows for an offline, privacy-first AI code reviewer in Go, executing context-aware syntactical analysis with sub-**2-second** response times.

Warden-Auth-CLI : Security-Hardened Infrastructure | *Go, Argon2id, Docker* [GitHub]

May 2026

- Developed APIs for a zero-trust authentication system utilizing Clean Architecture, integrating Argon2id hashing and time-based one-time passwords to maintain security for **100%** of user sessions.

Technical Skills

Languages: C++, Golang, Python, SQL, TypeScript/JavaScript

Systems & Architecture: High-Performance Computing, Distributed Systems, Computer Networks, gRPC, Database Internals

Cloud & Infrastructure: Docker, Kubernetes, Kafka, Linux (Bash), Deployment Pipelines, Git, GitHub

AI Tools & Frameworks: Machine Learning, NLP, FastAPI, LLMs, React, Redis, Reinforcement Learning

Competitive Programming and Problem Solving

- Codeforces** (Rating **1114**): Solved **430+** challenges applying a systematic problem-solving approach to complex algorithmic logic. Secured Rank **8686** globally (+99 rating boost) in Div. 2 Round 1061.
- LeetCode** (Rating **1622**): Solved **400+** algorithmic and data structure problems. Achieved Rank **7842** out of 26,300+ in Weekly Contest 479.

Education

SGGS Institute

Bachelor of Technology in Electronics & Telecommunications Engineering | CGPA: 7.12/10

Nanded, India

2024 – 2028

LBSD College

Class XII (HSC): 81.5% | Class X (SSC): 90%

Akot, India

2021 – 2024