



KubeCon



CloudNativeCon

India 2026

#KubeCon #CloudNativeCon

# Scaling the Developer Frontier: The TAG DevEx Roadmap for 2026



# TAG DevEx Chairs and Leaders



KubeCon



CloudNativeCon

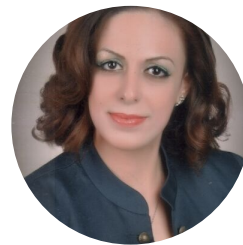
India 2026



**Daniel Oh**  
Co-Chair



**Graziano Casto**  
Co-Chair



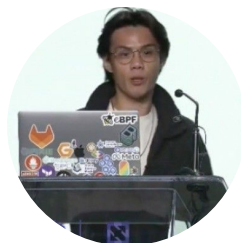
**Mona Borham**  
Co-Chair



**Kevin Dubois**  
Tech Lead



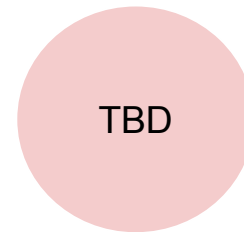
**Julien Semaan**  
Tech Lead



**Joshua Bezaleel Abednego**  
Tech Lead



**Mélony Qin**  
Tech Lead



TBD

**New**  
Tech Lead

# TAG Developer Experience Tech Lead Nomination 2026



KubeCon



CloudNativeCon

India 2026

## Election Guidelines

- Incumbents: Current Chairs and Tech Leads are welcome to stand for re-election.
- Nominations: There are no restrictions against self-nomination or nominating others for another term.
- Support: For questions, please reach out via the #toc Slack channel or email [cncf-toc@lists.cncf.io](mailto:cncf-toc@lists.cncf.io).

## 2026 Election Timeline

The TAG leadership elections follow the seating of the new Technical Oversight Committee (TOC).

Date	Milestone
May 11	New TOC seated; Nominations open for TAG Chairs
June 2	Nominations close; TOC Vote opens for TAG Chairs
June 15	TOC Vote closes; New TAG Chairs announced
June 1	Nominations open for TAG Technical Leads
June 22	Nominations close; Vote opens for TAG Technical Leads*
July 6	Voting closes; New Technical Leads announced

<https://github.com/cncf/toc/issues/2177>

Note: TAG Chairs only vote for the Technical Leads within their specific TAG.

- **Shared Standards and Resources**

- Create shared standards, guidance, and resources to improve developer experience

- **Project Support and Alignment**

- Support CNCF projects in understanding developer needs and building consistent, interoperable tools

- **Inclusive and Frictionless Access**

- Reduce barriers to entry and foster inclusive, frictionless cloud native development



- **Developer Tooling (Inner & Outer Loop)**

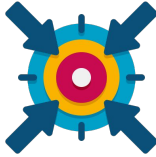
- Tools and practices that support developers across the full development lifecycle

- **Application Runtime**

- Cloud Native runtime patterns that shape how applications behave in production and significantly influence

- **Platform Engineering Enablement**

- Cross-cutting platform capabilities that improve developer experience and scalability across organizations



# Initiatives

## State of AI-Assisted Development in CNCF Projects



KubeCon



CloudNativeCon

India 2026

- **Focus**

- Accessing and documenting the current landscape of AI-Assisted Development in CNCF Projects

- **Key Objectives**

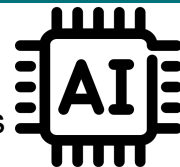
- Identify tools, techniques, and practices used / Discover opportunities for collaboration and standardization
- Understand benefits and challenges experienced / Provide recommendations for future initiatives

- **Methodology**

- Surveys, interviews, and analysis of project repositories and community discussions

- **Outcome**

- Comprehensive report outlining the state of AI-assisted development, with actionable insights for the CNCF ecosystem



# The state of AI in CNCF projects Survey:

## AI Governance & Transparency



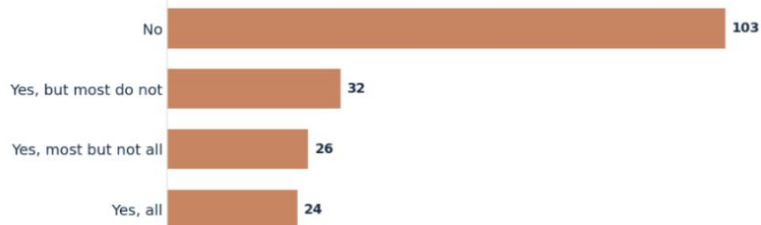
KubeCon



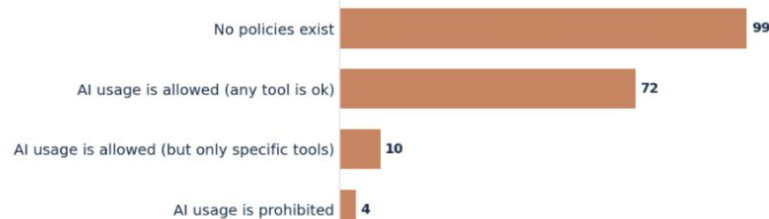
CloudNativeCon

India 2026

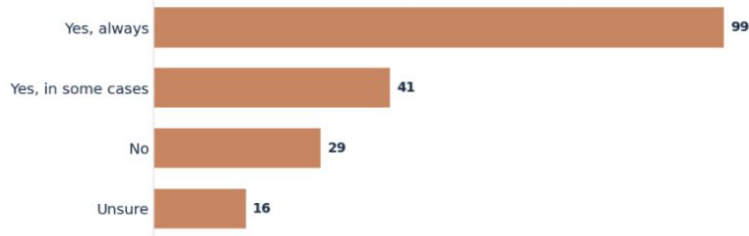
### Do projects disclose AI tool usage in docs/governance?



### Official AI policy / stance



### Should AI-assisted contributions be disclosed in PRs?



# The state of AI in CNCF projects Survey:

## AI Usage in Practice



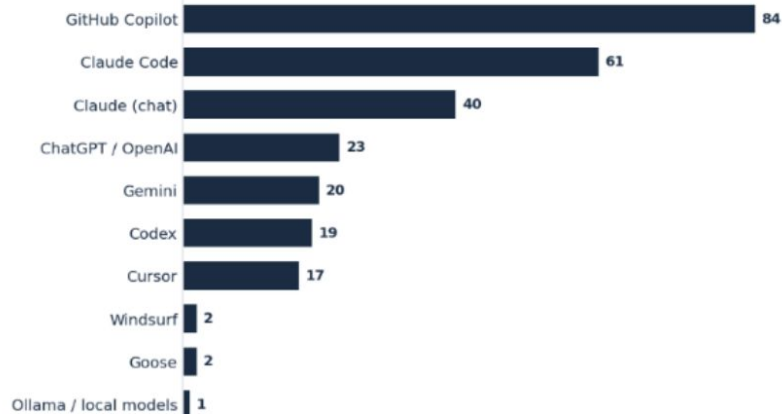
KubeCon



CloudNativeCon

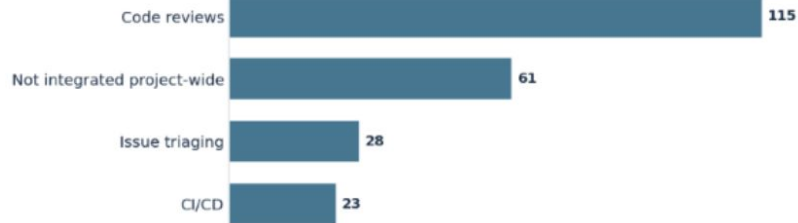
India 2026

Most-used AI tools / stack (mentions)



Keyword-detected across 171 free-text answers; respondents often list several.

Where AI is integrated as a project-wide utility



# The state of AI in CNCF projects Survey:

## AI Usage in Practice

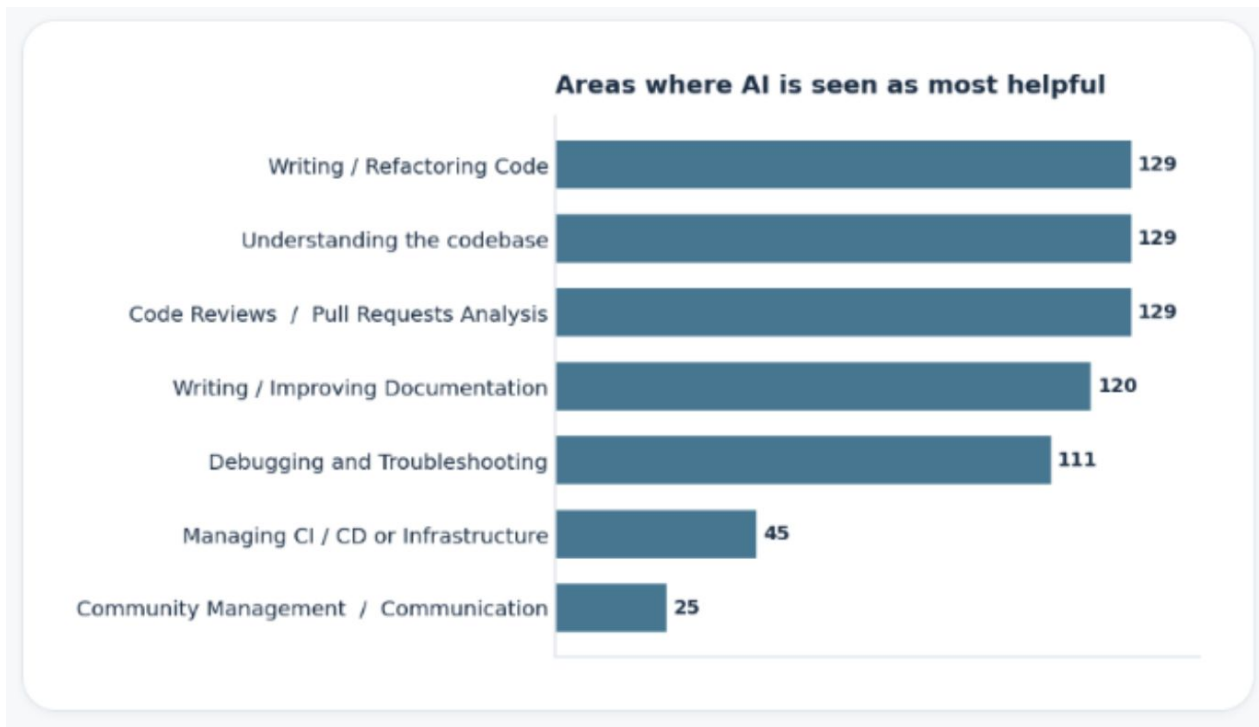


KubeCon



CloudNativeCon

India 2026



<https://www.cncf.io/blog/2026/04/29/the-state-of-ai-in-cncf-projects-a-first-look-at-the-data/>

# The state of AI in CNCF projects Survey:

## Maintainer Experience & Concerns



KubeCon



CloudNativeCon

India 2026

### Biggest concerns about AI usage in CNCF projects



# The state of AI in CNCF projects Survey:

## Maintainer Experience & Concerns



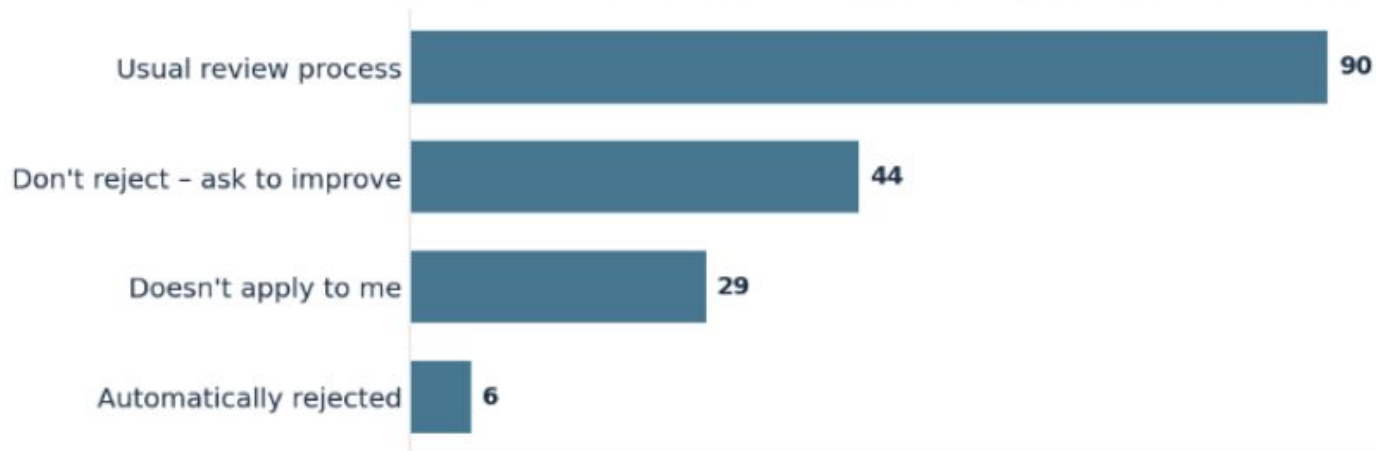
KubeCon



CloudNativeCon

India 2026

### How maintainers handle AI-looking PRs from new contributors



# Initiatives

## Specification for declaring application integration dependencies



- **Focus**

- Spec that lists integration dependencies needed for an application to run successfully

- **Key Objectives**

- Map AI Usage: Track and analyze real-world AI tool adoption across IDEs, CI pipelines, and code reviews within all CNCF projects
- Standardize Secure Adoption: Replace fragmented experimentation with a data-backed roadmap ensuring secure, efficient AI integration for cloud-native project maintainers

- **Deliverable(s) or exit criteria**

- Survey and Analysis Report: Launch a community-wide survey by Month 1 and publish a report by Month 3 identifying top AI tools and patterns
- Vendor-Neutral Reference Guide: Deliver an actionable Month 6 handbook providing maintainers with best practices for security, productivity, and AI workflow management



# PoC - Golang HTTP Profiler



KubeCon



CloudNativeCon

India 2026

## KEY HIGHLIGHTS



### Real-Time Metrics

Collects live performance data from Golang apps.



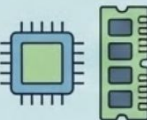
### Simple Integration

Easy to add to existing net/http code.



### Visualization Tool

Web-based UI for visualizing traces.



### CPU & Memory Profiling

Identify bottlenecks and memory leaks.

## PROJECT SUMMARY



### Code Integration

Import the profiler into your Go application.



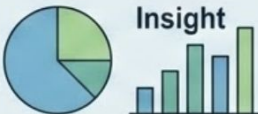
### Application Running

App runs, generating profile data.



### Data Collection

Tool collects and aggregates traces.



### Insight & Action

Review traces and optimize performance.

# Initiatives



KubeCon



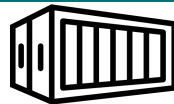
CloudNativeCon

India 2026

## Cloud Native and OCI Compliant Inner-Loop Tooling & Packaging for AI Engineers

- **Focus**

- Streamline the developer experience by unifying local AI experimentation and secure, production-ready Kubernetes deployment pipelines



- **Key Objectives**

- Integrate Inner-Loop Workflows: Bring local AI developer workflows into container-native, end-to-end CI/CD pipelines, making Kubernetes the default deployment target.
- Standardize OCI Packaging: Eliminate fragmentation by driving convergence toward a unified, secure OCI specification for packaging models, metadata, and data cards

- **Deliverable(s) or exit criteria**

- Idea-to-Inference POC: Create a technical proof-of-concept demonstrating a sub-ten-minute path for local, cloud-native AI agent development.
- Standardized Packaging & Pipeline Spec: Publish documented OCI artifact standards and a verified, secure reference pipeline utilizing model signing and provenance

# Initiatives

## Cloud Native and OCI Compliant Inner-Loop Tooling & Packaging for AI Engineers

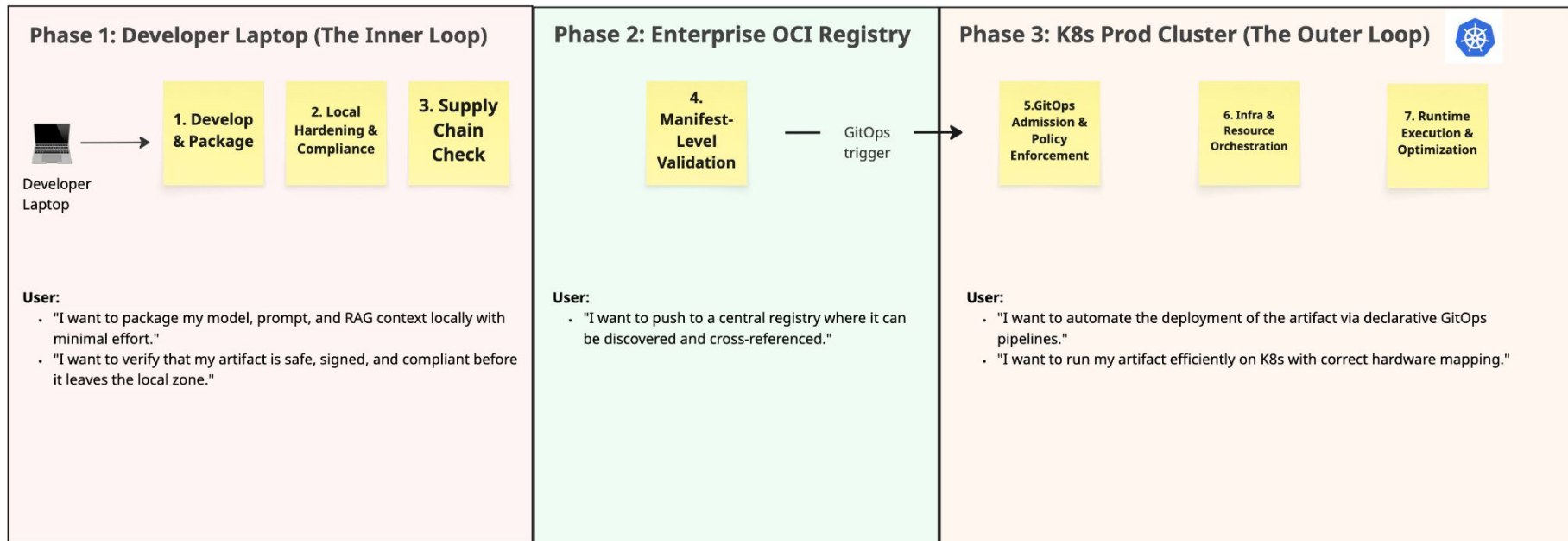


KubeCon



CloudNativeCon

India 2026



# Initiatives



KubeCon



CloudNativeCon

India 2026

## Developer Experience Improvement and Shared Practices of CNCF Projects

- **Focus**

- **Streamlining Maintainer Onboarding:** Simplify and standardize documentation structures to help new open-source contributors become active maintainers within the CNCF project ecosystem



- **Key Objectives**

- **Map Current Obstacles:** Research and document structural friction points, missing resources, and governance bottlenecks hindering contributor growth within existing projects
- **Harmonize Governance Standards:** Establish clear, repeatable templates that unify diverse project governance rules into transparent pathways for community leadership advancement

- **Deliverable(s) or exit criteria**

- **Friction Analysis Report:** Publish a detailed study detailing why contributors stall out before achieving maintainer status, featuring actionable structural solutions
- **Onboarding Template Blueprint:** Deliver a reusable handbook containing standardized templates for contributor ladders, governance roles, and maintainer transition guides

# Initiatives

## Vendor-neutral coding harness for CNCF



KubeCon



CloudNativeCon

India 2026

- **Focus**

- **Preventing AI Vendor Lock-in:** Decouple developer workflows from specific AI models and platforms by exploring standard, vendor-agnostic agentic harness interfaces for maintainers

- **Key Objectives**

- **Separate Workflow from Models:** Build a consistent interface allowing maintainers to switch or combine AI models without reworking execution patterns or code
- **Evaluate Open-Source Tools:** Research and catalog existing vendor-neutral options, identifying core capability gaps where new architectural approaches are required

- **Deliverable(s) or exit criteria**

- **Option Repositories:** Publish functional example repositories showcasing implementation recipes for every verified, vendor-agnostic AI coding harness evaluated
- **Maintainer Outreach Content:** Produce a CNCF blog post and a KubeCon technical presentation sharing insights and portable workflow strategies with project maintainers



# Initiatives: **Completed**



KubeCon



CloudNativeCon

India 2026

Showcasing Frictionless Secure Coding Success Stories and Pain Points in CNCF Projects

- **Focus**

- **Balancing Security and Usability:** Document and analyze real-world cloud-native workflows to optimize security practice adoption without adding friction for open-source contributors.



- **Key Objectives**

- **Identify Frictionless Patterns:** Surface repeatable tools, processes, and cultural practices that successfully integrate security guidelines with minimal impact on developer experience
- **Uncover Contributor Pain Points:** Highlight the core bottlenecks and operational challenges CNCF maintainers face when trying to adopt recommended security frameworks early

- **Deliverable(s) or exit criteria**

- **Pain Point & Usability Report:** Publish a comprehensive findings report providing maintainers with actionable recommendations to resolve secure coding workflow bottlenecks
- **Maturity Case Studies:** Deliver real-world case studies from established CNCF projects demonstrating proven, repeatable approaches to frictionless security integration

<https://github.com/cncf/toc/issues/1943>

# Survey Results Analysis: Secure Coding Practices in CNCF Projects



KubeCon



CloudNativeCon

India 2026

## Highlights & Takeaways

- Tool Adoption Variance: Projects show widely varying adoption rates for automated security scanning tools across different stages of development
- Integration Pain Points: Maintainers consistently flag operational bottlenecks and documentation overhead when incorporating mandated secure coding frameworks
- Friction Identification: True compliance requires balancing security enforcement with contributor tooling simplicity to protect velocity and project health

# Discussion and Questions



KubeCon



CloudNativeCon

India 2026



# We need your input and feedback!



KubeCon



CloudNativeCon

India 2026

Everyone is welcome to join TAG DevEx! To participate:



<https://lists.cncf.io/g/cncf-tag-developer-experience/>



<https://github.com/cncf/toc/tree/main/tags/tag-developer-experience>



<https://cloud-native.slack.com/archives/C08KGCXB458>



<https://contribute-cncf-io.netlify.app/community/tags/developer-experience/>





KubeCon



CloudNativeCon

India 2026

# Thank you!

