

FREE PLAYBOOK · 2026 EDITION

The AI DevOps Engineer Playbook

From DevOps Engineer to AI-Ready Platform Engineer.

Market intelligence, AI operations skills and automation decisions: a practical roadmap for experienced DevOps engineers, SREs and platform engineers.

By AgileFever · Updated October 2026 · Sources cited

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THE ROADMAP AT A GLANCE

STAGE 01	STAGE 02	STAGE 03	STAGE 04	STAGE 05
AI Foundations	AI for DevOps	Agentic Ops	Running AI	Prove the Capability
LLMs, GenAI, ops patterns	CI/CD, IaC, incidents	Agents, tools, approvals	LLMOps, security, cost	Pipelines, runbooks, portfolio

01 · THE SHIFT

DevOps Is Changing

AI is changing DevOps from both sides. It helps automate pipelines, infrastructure and incident response, and it creates new workloads that teams must deploy, monitor, secure and pay for.

Traditional DevOps Engineer	AI-Ready DevOps Engineer	AI can accelerate	You still own
CI/CD pipelines	AI-assisted CI/CD	Pipeline and IaC drafts	Production changes
Infrastructure as code	AI-generated IaC with review	Log analysis	Reliability and SLOs
Containers and Kubernetes	AI workload deployment	Incident summaries	Security and access
Monitoring and alerting	AI observability and evals	Runbook drafts	Change approval
Incident response	Agentic incident response	Postmortem drafts	Incident decisions
Security and compliance	AI security and guardrails	Config troubleshooting	Cost decisions
Cloud cost management	GPU and token cost control		Production accountability

“The DevOps role is not disappearing. **The platform is expanding.**”

02 · THE MARKET

Is Becoming AI-Ready Worth the Investment?

U.S. DEVOPS ENGINEER SALARY	INDIA LEAD DEVOPS SALARY	U.S. AI HIRING	INDIA AI HIRING
\$146K /year	₹23 lakh /year	~90,000	381,846
Median total pay. Base pay range \$100K–\$150K; total pay range \$118K–\$182K.	Average base pay for lead DevOps engineers, plus ₹2 lakh/year average additional pay. Senior DevOps engineers report ₹10–₹22 lakh/year.	U.S. job postings mentioned Agentic AI skills in 2025, up more than 280% from 2024. 2.6% of all postings mentioned AI skills, up 55%.	Projected AI job postings in 2026, up 32% from 290,256 in 2025, shifting toward production AI and scalable deployment.
Glassdoor U.S., October 2026 · self-reported	Glassdoor India, October 2026 · self-reported	Stanford AI Index 2026 / Lightcast	foundit Insights Tracker, January 2026

What this means. AI hiring data does not equal DevOps hiring. But every AI system that reaches production needs pipelines, infrastructure, monitoring, security and cost control. That is platform work.

What Should an AI DevOps Engineer Actually Understand?

Not how to train models. Understand how AI helps you operate, what new workloads it adds, and what can go wrong when AI touches production.

01 AI Foundations	LLMs · GenAI · Model hosting options	e.g. managed APIs vs self-hosted models on GPUs, and what each costs
02 AI for DevOps Work	CI/CD · IaC · Code review · Log analysis	e.g. AI-drafted Terraform and pipeline changes that still go through review
03 Knowledge & Runbooks	RAG over docs · Runbooks · Postmortems	e.g. an assistant that finds the right runbook from an alert
04 Agentic Ops	Agents · Tool calling · Approvals · MCP	e.g. an agent that reads metrics and logs, with write actions behind approval
05 AI Workloads	Model serving · GPUs · Vector DBs · LLM gateways	e.g. Kubernetes for inference, rate limits, model routing and failover
06 Production	LLMOps · Security · Observability · Cost	e.g. tracing AI calls, prompt-injection defenses, token and GPU budgets

What Changes From DevOps Engineer to AI-Ready DevOps Engineer?

You already have	Extend it to
CI/CD pipelines	AI-assisted pipelines and eval gates
Infrastructure as code	AI-generated IaC with review
Kubernetes	AI and inference workloads
Monitoring	AI observability and tracing
Alerting	AI-assisted triage
Incident response	Agentic incident response
Runbooks	RAG-backed runbooks
Access control	Agent permissions and approvals
Security	AI security and guardrails
Cloud cost	GPU and token cost control

5 Mistakes DevOps Engineers Make With AI

- 01 Giving AI agents write access to production on day one
- 02 Accepting AI-generated IaC without review or policy checks
- 03 Monitoring AI services like normal APIs and missing quality drift
- 04 Ignoring token and GPU cost until finance asks
- 05 Automating a fix before you understand the failure

Your advantage. You already understand pipelines, infrastructure, reliability, access and cost. AI adds a new layer of automation and new workloads. It does not replace the operational judgment you already have.

Can You Design AI for Operations?

The scenario

A platform team wants AI to help with production incidents. It must:

- Read alerts, metrics and logs
- Suggest likely causes from past runbooks
- Open and update incident tickets
- Restart services when it is safe
- Follow the change approval policy
- Keep a full audit trail
- Never make an unapproved production change

Which design would you choose? Pick one to see the reasoning.

A A chatbot over the docs

B A fully autonomous remediation agent

C Scripted auto-remediation only

D Agent with read tools, runbook RAG and approval gates

Best fit.

The agent reads alerts and logs, finds runbooks, drafts the diagnosis and opens tickets. Write actions wait for human approval and every step is logged. This is the strongest design.

The AI Operations Decision Framework

01 Define the toil.

Which repeated work costs the most time?

02 Check the need.

Would a script or existing automation do it?

03 Map the data.

Which logs, metrics, docs and tickets are needed?

04 Choose the pattern.

Script, workflow, RAG assistant or agent?

05 Limit the access.

Read by default; writes behind approval.

06 Add the controls.

Audit logs, change records, rate limits and rollback.

07 Run it in production.

Evals, monitoring, failure handling and cost.

Situation	Best fit
Known fix, low risk	Scripted automation
Diagnosis across logs and runbooks	Agent with read tools + RAG
Production change	Human approval + change record
Same issue repeats	Promote the fix to a runbook script
Unknown failure	Escalate to on-call with context

The principle. Automate with the least access that reliably solves the problem. More autonomy does not automatically mean better operations.

06 · THE ROADMAP

From Experienced DevOps Engineer to AI-Ready Platform Engineer

Work through the stages in order. Each one ends with something you can do, not just something you know.

STAGE 01 · UNDERSTAND

AI Foundations

LLMs · GenAI · Model hosting options

You can: explain how AI services run and compare hosting options on cost and latency.

STAGE 02 · LEARN

AI for DevOps

CI/CD · IaC · Log analysis · Incident summaries

You can: use AI to speed up pipelines and IaC while keeping review and policy checks.

STAGE 03 · LEARN

Agentic Ops

Agents · Tool calling · Approval gates · MCP

You can: build an incident agent with read access and approval-gated actions.

STAGE 04 · MASTER

Running AI

LLMOps · Model serving · Observability · Security · Cost

You can: deploy and monitor an AI workload, and forecast its GPU and token cost.

STAGE 05 · BUILD

Prove the Capability

AI pipelines · Agentic runbooks · Platform designs · DevOps portfolio

You can: defend an AI operations design to security, SRE and engineering leadership.

Self-check: can you confidently answer these?

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☐ When should we automate with AI?

☐ When should we avoid AI entirely?

☐ What access should an AI agent have?

☐ How do we review AI-generated IaC?

☐ How do we monitor AI services?

☐ How do we control GPU and token cost?

☐ How do we secure AI workloads?

☐ How do we design for AI failure?

☐ How do we move AI from pilot to production?

☐ Can I defend an AI ops design to security and SRE leadership?

THE NEXT STEP

You already know how to run production systems.
Now learn how to run them with AI, and how to run AI.

Gen AI & Agentic AI for DevOps Engineers: automate, deploy, observe, secure and control cost.

Explore the Program

Not ready? Join a Free Masterclass

Sources. Glassdoor U.S., DevOps Engineer Salary, October 2026 · Glassdoor India, Lead DevOps Engineer and Senior DevOps Engineer Salary, October 2026 · Stanford AI Index 2026 / Lightcast, AI skills and U.S. labor-market data · foundit Insights Tracker, India AI Hiring Trends, 2025–2026.