

Associate Director AI Platform Architect – AWS

Job ID

REQ-10077324

May 11, 2026

LOC_IN

About the Role

Major accountabilities:

AWS AI Platform Architecture

- Design, architect, and evolve enterprise-scale AI platform capabilities leveraging AWS Bedrock, Amazon SageMaker, AWS Bedrock AgentCore, and other AWS-native AI services.
- Build and maintain reusable AWS AI reference architectures, enterprise blueprints, and platform standards to accelerate scalable AI adoption across Novartis.
- Architect AI platform capabilities for Retrieval-Augmented Generation (RAG), Graph AI, multi-agent orchestration, and enterprise knowledge systems. Design secure and scalable AI runtime environments integrating AWS services such as Lambda, ECS/EKS, Step Functions, API Gateway, DynamoDB, S3, and EventBridge.

GenAI & Multi-Agent Platform Engineering

- Lead architecture for Bedrock Agents, AgentCore runtime patterns, and multi-agent collaboration frameworks supporting enterprise AI use cases. Enable enterprise AI orchestration capabilities using LangChain, LangGraph, LlamaIndex, DSPy, and AWS-native orchestration services.
- Design enterprise AI platform capabilities for prompt management, model evaluation, guardrails, observability, and AI governance. Support AI platform integrations with enterprise systems, APIs, vector databases, and data platforms.

MLOps & Platform Operations

- Define scalable MLOps architecture leveraging SageMaker Pipelines, Model Registry, Feature Store, Model Monitor, and CI/CD automation frameworks.
- Collaborate with platform engineering teams to operationalize AI workloads with observability, resiliency, auditability, and cost optimization. Drive platform modernization initiatives enabling enterprise-scale deployment, monitoring, and lifecycle management of GenAI applications.

Governance, Security & Compliance

- Ensure all AI platform architectures align with Novartis security standards, GDPR, HIPAA, GxP validation requirements, and the EU AI Act.
- Define AWS security and networking standards for AI workloads including IAM, VPC, PrivateLink, KMS encryption, Secrets Manager, and CloudTrail.
- Embed responsible AI controls using Amazon Bedrock Guardrails, SageMaker Clarify, model evaluation frameworks, and enterprise governance tooling.
- Collaborate with Legal, Risk, and Regulatory stakeholders to ensure platforms meet current and anticipated regulatory frameworks across all geographies in which Novartis operates.

Technology Evaluation & Innovation

- Evaluate emerging AWS GenAI technologies, foundation models, and AI frameworks to support Novartis AI strategy and innovation roadmap.
- Lead proof-of-concept (PoC) initiatives validating scalability, security, performance, and operational readiness of new AI platform capabilities.
- Partner with AWS and strategic vendors to drive innovation and align with AWS Well-Architected Framework principles

for AI workloads.

- Represent the AI Architecture function in innovation councils, governance reviews, and enterprise architecture forums.

Leadership & Collaboration

- Provide architectural leadership and mentorship to engineering and solution teams within the India hub and global organizations.
- Act as a trusted advisor to Business Units and AI Product Management teams, translating business requirements into scalable AI platform architectures.
- Collaborate with enterprise architects, cloud engineering, and data platform teams to ensure consistency and scalability across AI platforms.

Minimum Requirements:

- Bachelor's / Master's degree in Computer Science, AI/ML, Data Science, Cloud Computing, or equivalent.
- 14+ years of experience in enterprise IT/solution architecture including 5+ years in AI/ML and 3+ years in GenAI platform architecture.
- Deep hands-on expertise with AWS AI/ML services including Amazon Bedrock, SageMaker, Bedrock Agents, Lambda, ECS/EKS, Step Functions, API Gateway, and related AWS ecosystem services.
- Strong experience architecting enterprise AI platforms supporting RAG, Graph AI, multi-agent orchestration, and GenAI application delivery.
- Hands-on experience with MLOps platforms, CI/CD pipelines, infrastructure-as-code, and enterprise observability frameworks.
- Strong understanding of AI governance, security, compliance, and regulatory requirements including GDPR, HIPAA, GxP, and EU AI Act.
- AWS certifications strongly preferred: AWS Certified Solutions Architect – Professional and/or AWS Certified Machine Learning Specialty. Experience in pharma, healthcare, or life sciences industry highly preferred.
- Proficiency in Python and familiarity with orchestration frameworks such as LangChain, LangGraph, LlamaIndex, and DSPy.
- Excellent stakeholder management, communication, and executive presentation skills

Why Novartis?

Our purpose is to reimagine medicine to improve and extend people's lives and our vision is to become the most valued and trusted medicines company in the world. How can we achieve this? With our people. It is our associates that drive us each day to reach our ambitions. Be a part of this mission and join us!

Learn more here:

<https://www.novartis.com/about/strategy/people-and-culture>

Commitment to Diversity and Inclusion:

Novartis is committed to building an outstanding, inclusive work environment and diverse teams' representative of the patients and communities we serve.

Join our Novartis Network: If this role is not suitable to your experience or career goals but you wish to stay connected to hear more about Novartis and our career opportunities, join the Novartis Network here:

<https://talentnetwork.novartis.com/network>

Role Requirements

Why Novartis: Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together? <https://www.novartis.com/about/strategy/people-and-culture>

Benefits and Rewards: Learn about all the ways we'll help you thrive personally and professionally.

[Read our handbook \(PDF 30 MB\)](#)

Division
DIV_TO
Business Unit
Information Technology
Location
LOC_IN
Site
Hyderabad (Office)
Company / Legal Entity
IN10 (FCRS = IN010) Novartis Healthcare Private Limited
Functional Area
FCT_DD
Job Type
Full time
Employment Type
Regular
Shift Work
No
Apply to Job

Job ID
REQ-10077324

Associate Director AI Platform Architect – AWS

Apply to Job

Source URL: <https://jobapi.novartis.com/req-10077324-associate-director-ai-platform-architect-aws>

List of links present in page

1. <https://jobapi.novartis.com/req-10077324-associate-director-ai-platform-architect-aws>
2. <https://www.novartis.com/about/strategy/people-and-culture>
3. <https://talentnetwork.novartis.com/network>
4. <https://www.novartis.com/about/strategy/people-and-culture>
5. https://www.novartis.com/sites/novartis_com/files/novartis-life-handbook.pdf
6. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Hyderabad-Office/Associate-Director-AI-Platform-Architect---AWS_REQ-10077324
7. https://novartis.wd3.myworkdayjobs.com/en-US/Novartis_Careers/job/Hyderabad-Office/Associate-Director-AI-Platform-Architect---AWS_REQ-10077324