AMGEN

Sr Machine Learning Engineer

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ABOUT AMGEN

Amgen harnesses the best of biology and technology to fight the world's toughest diseases, and make people's lives easier, fuller and longer. We discover, develop, manufacture and deliver innovative medicines to help millions of patients. Amgen helped establish the biotechnology industry more than 40 years ago and remains on the cutting-edge of innovation, using technology and human genetic data to push beyond what's known today.

ABOUT THE ROLE

Role Description:

We are seeking a Sr Machine Learning Engineer—Amgen's most senior individual-contributor authority on building and scaling end-to-end machine-learning and generative-AI platforms. Sitting at the intersection of engineering excellence and data-science enablement, you will design the core services, infrastructure and governance controls that allow hundreds of practitioners to prototype, deploy and monitor models—classical ML, deep learning and LLMs—securely and cost-effectively. Acting as a "player-coach," you will establish platform strategy, define technical standards, and partner with DevOps, Security, Compliance and Product teams to deliver a frictionless, enterprise-grade AI developer experience.

Roles & Responsibilities:

- Engineer end-to-end ML pipelines—data ingestion, feature engineering, training, hyper-parameter optimisation, evaluation, registration and automated promotion—using Kubeflow, SageMaker Pipelines, Open AI SDK or equivalent MLOps stacks.
- Harden research code into production-grade micro-services, packaging models in Docker/Kubernetes and exposing secure REST, gRPC or event-driven APIs for consumption by downstream applications.
- Build and maintain full-stack AI applications by integrating model services with lightweight UI components, workflow engines or business-logic layers so insights reach users with sub-second latency.
- Optimise performance and cost at scale—selecting appropriate algorithms (gradient-boosted trees, transformers, time-series models, classical statistics), applying quantisation/pruning, and tuning GPU/CPU auto-scaling policies to meet strict SLA targets.
- Instrument comprehensive observability—real-time metrics, distributed tracing, drift & bias detection and user-behaviour analytics—enabling rapid diagnosis and continuous improvement of live models and applications.
- Embed security and responsible-AI controls (data encryption, access policies, lineage tracking, explainability and bias monitoring) in partnership with Security, Privacy and Compliance teams.
- Contribute reusable platform components—feature stores, model registries, experiment-tracking libraries—and evangelise best practices that raise engineering velocity across squads.
- Perform exploratory data analysis and feature ideation on complex, high-dimensional datasets to inform algorithm selection and ensure model robustness.
- Partner with data scientists to prototype and benchmark new algorithms, offering guidance on scalability trade-offs and production-readiness while co-owning model-performance KPIs.

Must-Have Skills:

- 3-5 years in AI/ML and enterprise software.
- Comprehensive command of machine-learning algorithms—regression, tree-based ensembles, clustering, dimensionality reduction, time-series models, deep-learning

architectures (CNNs, RNNs, transformers) and modern LLM/RAG techniques—with the judgment to choose, tune and operationalise the right method for a given business problem.
- Proven track record selecting and integrating AI SaaS/PaaS offerings and building custom ML services at scale.
- Expert knowledge of GenAI tooling: vector databases, RAG pipelines, prompt-engineering DSLs and agent frameworks (e.g., LangChain, Semantic Kernel).
- Proficiency in Python and Java; containerisation (Docker/K8s); cloud (AWS, Azure or GCP) and modern DevOps/MLOps (GitHub Actions, Bedrock/SageMaker Pipelines).
- Strong business-case skills—able to model TCO vs. NPV and present trade-offs to executives.
- Exceptional stakeholder management; can translate complex technical concepts into concise, outcome-oriented narratives.

Good-to-Have Skills:

- Experience in Biotechnology or pharma industry is a big plus
- Published thought-leadership or conference talks on enterprise GenAI adoption.
- Master's degree in Computer Science and or Data Science
- Familiarity with Agile methodologies and Scaled Agile Framework (SAFe) for project delivery.

Education and Professional Certifications

- Master's degree with 6-11 + years of experience in Computer Science, IT or related field

OR

- Bachelor's degree with 8-13 + years of experience in Computer Science, IT or related field
- Certifications on GenAI/ML platforms (AWS AI, Azure AI Engineer, Google Cloud ML, etc.) are a plus.

Soft Skills:

- Excellent analytical and troubleshooting skills.
- Strong verbal and written communication skills
- Ability to work effectively with global, virtual teams
- High degree of initiative and self-motivation.
- Ability to manage multiple priorities successfully.
- Team-oriented, with a focus on achieving team goals.
- Ability to learn quickly, be organized and detail oriented.
- Strong presentation and public speaking skills.

EQUAL OPPORTUNITY STATEMENT
Amgen is an Equal Opportunity employer and will consider you without regard to your race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status, or disability status.
We will ensure that individuals with disabilities are provided with reasonable accommodation to participate in the job application or interview process, to perform essential job functions, and to receive other benefits and privileges of employment. Please contact us to request an accommodation.

Ready to Apply for the Job?
We highly recommend utilizing Workday's robust Career Profile feature to complete the application process. A link to update your profile is available when you click Apply. You can then complete your Workday profile in minutes with the "Upload My Experience" functionality to upload an updated copy of your resume or you can simply edit the individual sections of your Career Profile.

Please note that you should be in your current position for at least 18 months before applying to internal positions. Staff must notify their current manager if invited for an interview. In addition, Staff are ineligible to apply for open positions if (a) their performance is currently being managed on a performance improvement plan (PIP) or other locally utilized formal coaching document or (b) their most recent performance rating was not a "Partially Meets Expectations" or higher. Please visit our Internal Transfer Guidelines for more detailed information

GCF Level

GCF Level 05

Career Category

Information Systems

Position Type

Full time

Job Details

Job Requisition ID	R-219477
Remote Type	On Site
Location	India - Hyderabad
Posting Date	06/30/2025 - 1 month ago
Job Family	Sci Tech - Machine Learning Engineer
Time Type	Full time
Job Type	Regular

Hiring Team

Recruiter

Kajole Agrawal

Internal: Sr Machine Learning Engineer