AI ENGINEER

TIER 3 SKILLSET

Core Skills

Basic Python and Java coding

Understanding of ML basics (CNN, RNN, Transformers conceptually)

Basic NLP and CV fundamentals

Using libraries like OpenCV, Tesseract, SpaCy

Familiarity with HuggingFace transformers (not deep knowledge)

Basic understanding of RAG

Light prompt engineering

Small ML projects

SQL/NoSQL familiarity

Understanding network basics + basic IT/foundation knowledge

Knowledge of ITIL, incident/change management

Writing documentation, collaborating with teams

Basic scripting (PowerShell, Shell)

TIER 2 SKILLSET

Core Skills

Good coding in Python + Java

Training ML/DL models end-to-end

Working knowledge of Transformers through HF

OCR/OMR, basic CV pipelines

Experience with LLM APIs + prompt engineering

Knowledge of embedding models + classical RAG

Familiarity with LangChain, LlamaIndex

Working with vector DBs (Pinecone, Milvus)

Using PyTorch/TensorFlow for smaller projects

Building FastAPI services or integrating ML into simple backend systems

Some Docker/Kubernetes exposure

Cloud basics (Azure, GCP, AWS)

Information retrieval basics

Understanding agents and workflows at application level

Handling PDFs/TIFF datasets with annotation tooling

Soft Skills

Clear communication

Team collaboration

Ability to break down tasks independently

TIER 1 SKILLSET

Core Technical Firepower

Transformer internals, attention math, efficient training

LLM Fine-Tuning (LoRA, QLoRA, adapters, RLHF, DPO)

Advanced RAG (graph, multi-modal, agents, retrieval optimization)

Building & benchmarking scalable LLM pipelines (RAGAS, eval harnesses)

Model deployment at scale (K8s, Docker, GPUs, distributed inference)

Mastery of PyTorch (preferred) or TensorFlow

Designing experiments at research depth

Working with open-source + proprietary LLMs deeply (Llama, Qwen, GPT-series)

ML systems architecture + MLOps lifecycle management

Data engineering at scale (Spark, Kafka, Hadoop)

Understanding of microservices, distributed systems, real-time constraints

Vector database integration (Pinecone, Weaviate, Milvus)

Experience integrating AI into production systems

Strong domain specialization (e.g., Life Sciences, Healthcare, Pharma NLP)

Handling massive document corpora with OCR/OMR + CV pipelines

Cloud-native AI workflows (SageMaker, Vertex AI, Azure ML)

Soft but essential

Leading experiments, cross-team collab

High analytical + debugging intelligence

Capable of SRE/MLOps responsibilities

Large-scale system design thinking

SDE

TIER 3 SKILLSET

Core Skills

Basic C/C++ or Python or Java

Basic DSA concepts

OOP fundamentals

HTML, CSS, JavaScript

Basic Git

Basic React.js or Node.js

Basic SQL understanding

Ability to write simple working programs

Understand error messages instead of panicking

Soft Skills

Ability to learn fast

Basic communication

Following instructions without needing a rescue squad

Patience to debug without rage-quitting

TIER 2 SKILLSET

Core Skills

Stronger DSA + problem solving

Solid coding in C++/Java on Linux

Good object-oriented design

Building functional apps using React.js + Node.js

SQL + NoSQL fluency (MySQL/MongoDB)

REST API development

Cloud basics (AWS/GCP fundamentals)

CI/CD basics (Jenkins, GitHub Actions)

Scalable architecture fundamentals

Debugging in real-world scenarios

Soft Skills

Ability to explain technical choices clearly

Collaboration with teams

Adaptability in changing requirements

Ownership of tasks

TIER 1 SKILLSET

Core Skills

Master-level DSA + algorithmic intuition

System design (low-level + high-level)

Expert backend engineering (Java/Python microservices at scale)

Distributed systems, concurrency, optimization

High-quality code in C++/Java on Linux

AWS mastery + Kubernetes + Helm + Docker

DynamoDB, Snowflake, Postgres expertise

CI/CD engineering expertise (Jenkins, GitOps)

LLM development: LangChain, OpenAI, HuggingFace

Prompt engineering + AI-first architecture

Multi-tier distributed design under real load

Ability to solve undefined, ambiguous technical problems

Soft Skills

Strong articulation of complex technical ideas

Abstract thinking under pressure

Cross-functional teamwork with clarity

Leadership in design discussions

Strategic decision-making under uncertainty

DEVOPS

TIER 3

Core Skills

Linux basics (package install, services, permissions)

Git basics (clone, push, branch, merge conflicts)

Basic CI/CD (GitHub Actions or Jenkins simple pipelines)

Cloud fundamentals (AWS/GCP/Azure overview, EC2 basics)

Docker basics (build, run, push)

YAML understanding

Bash scripting basics

Monitoring basics (alert types, logs, dashboards)

Terraform basics (providers, simple resources, variables)

Kubernetes basics (pods, deployments, services)

Database fundamentals (MySQL dump/restore)

Soft Skills

Ability to communicate blockers quickly

Discipline to follow instructions

Willingness to learn without ego

Ability to document whatever the team needs

Staying calm when pipelines fail instead of crying inside

TIER 2

Core Skills

Strong Linux + scripting (Bash/Python)

Terraform modules, remote state, workspaces

CI/CD mastery (GitHub Actions / Jenkins / GitLab CI)

Kubernetes operations (Ingress, autoscaling, Helm, rollbacks)

AWS/GCP practitioner-level services:

IAM, VPC, ALB/NLB, Route53

S3, CloudFront

Lambda basics

RDS, Cloud SQL

Secret management (Vault, KMS, SSM)

Monitoring/observability:

Prometheus, Grafana

ELK/Splunk

Basic tracing concepts

Container orchestration workflows

Event-driven basics (Kafka/RabbitMQ overview)

Backup/restore strategy

Security fundamentals (least privilege, audit readiness)

Soft Skills

Clear, fast communication

Ownership mindset

Ability to mentor junior interns

Taking initiative without needing hand-holding

Writing runbooks and maintaining documentation for teams

TIER 1

Core Skills

Full AWS/GCP mastery:

EKS

Lambda, EventBridge

Kafka at scale

Advanced IAM governance

Cost optimization strategies

Terraform Mastery:

Highly modular infra

Multi-environment state mgmt

Complex networking and security

Complete Kubernetes Mastery:

Operators

Service meshes

Canary/blue-green

ArgoCD/GitOps workflows

Security & compliance mastery:

SOC II

Inspector, GuardDuty

Automated compliance pipelines

Observability engineering:

OpenTelemetry instrumentation

Distributed tracing

Metrics correlation

Fine-grained dashboards

High-availability architecture design

Performance tuning across layers (network, DB, microservices)

Infra migration leadership (on-prem !’ cloud, monolith !’ microservices)

Multi-cloud CI/CD across GitHub Actions, Jenkins, ArgoCD

SRE concepts:

SLIs, SLOs, error budgets

Soft Skills

Leadership under pressure

Mentoring entire DevOps teams

Running major incident calls without losing your soul

Communicating architecture decisions with clarity

Extreme ownership without excuses